FACILITY NAME AND PERMIT NUMBER:
Riner STP VA0024040

Form Approved 1/14/99
OMB Number 2040-0086

FORM 2A NPDES

NPDES FORM 2A APPLICATION OVERVIEW

APPLICATION OVERVIEW

Form 2A has been developed in a modular format and consists of a "Basic Application Information" packet and a "Supplemental Application Information" packet. The Basic Application Information packet is divided into two parts. All applicants must complete Parts A and C. Applicants with a design flow greater than or equal to 0.1 mgd must also complete Part B. Some applicants must also complete the Supplemental Application Information packet. The following items explain which parts of Form 2A you must complete.

BASIC APPLICATION INFORMATION:

A. **Basic Application Information for all Applicants.** All applicants must complete questions A.1 through A.8. A treatment works that discharges effluent to surface waters of the United States must also answer questions A.9 through A.12.

B. **Additional Application Information for Applicants with a Design Flow ≥ 0.1 mgd.** All treatment works that have design flows greater than or equal to 0.1 million gallons per day must complete questions B.1 through B.6.

C. **Certification.** All applicants must complete Part C (Certification).

SUPPLEMENTAL APPLICATION INFORMATION:

D. **Expanded Effluent Testing Data.** A treatment works that discharges effluent to surface waters of the United States and meets one or more of the following criteria must complete Part D (Expanded Effluent Testing Data):

1. Has a design flow rate greater than or equal to 1 mgd,
2. Is required to have a pretreatment program (or has one in place), or
3. Is otherwise required by the permitting authority to provide the information.

E. **Toxicity Testing Data.** A treatment works that meets one or more of the following criteria must complete Part E (Toxicity Testing Data):

1. Has a design flow rate greater than or equal to 1 mgd,
2. Is required to have a pretreatment program (or has one in place), or
3. Is otherwise required by the permitting authority to submit results of toxicity testing.

F. **Industrial User Discharges and RCRA/CERCLA Wastes.** A treatment works that accepts process wastewater from any significant industrial users (SIUs) or receives RCRA or CERCLA wastes must complete Part F (Industrial User Discharges and RCRA/CERCLA Wastes). SIUs are defined as:

1. All industrial users subject to Categorical Pretreatment Standards under 40 Code of Federal Regulations (CFR) 403.6 and 40 CFR Chapter I, Subchapter N (see instructions); and
2. Any other industrial user that:
   a. Discharges an average of 25,000 gallons per day or more of process wastewater to the treatment works (with certain exclusions); or
   b. Contributes a process wastestream that makes up 5 percent or more of the average dry weather hydraulic or organic capacity of the treatment plant; or
   c. Is designated as an SIU by the control authority.

G. **Combined Sewer Systems.** A treatment works that has a combined sewer system must complete Part G (Combined Sewer Systems).

ALL APPLICANTS MUST COMPLETE PART C (CERTIFICATION)

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BASIC APPLICATION INFORMATION

PART A. BASIC APPLICATION INFORMATION FOR ALL APPLICANTS:

All treatment works must complete questions A.1 through A.8 of this Basic Application Information packet.

A.1. Facility Information.

Facility name: Riner STP

Mailing Address: 755 Roanoke St., Suite 2-I
Christiansburg, Virginia 24073

Contact person: Bruce R. Jones

Title: Water/Wastewater Supervisor

Telephone number: (540) 268-5143

Facility Address (not P.O. Box): 4351 Riner Rd.
Riner, Virginia 24149

A.2. Applicant Information. If the applicant is different from the above, provide the following:

Applicant name: Montgomery County Public Service Authority

Mailing Address: 755 Roanoke St., Suite 2-I
Christiansburg, Virginia 24073

Contact person: Bruce R. Jones

Title: Water/Wastewater Supervisor

Telephone number: (540) 268-5143

Is the applicant the owner or operator (or both) of the treatment works?

✓ owner ✓ operator

Indicate whether correspondence regarding this permit should be directed to the facility or the applicant.

_____ facility ✓ applicant

A.3. Existing Environmental Permits. Provide the permit number of any existing environmental permits that have been issued to the treatment works (include state-issued permits).

NPDES	VA0024040	PSD	
UIC		Other	
RCRA		Other	

A.4. Collection System Information. Provide information on municipalities and areas served by the facility. Provide the name and population of each entity and, if known, provide information on the type of collection system (combined vs. separate) and its ownership (municipal, private, etc.).

Name	Population Served	Type of Collection System	Ownership
Riner, Virginia	250	Seperate	Municipal

Total population served 250

A.5. Indian Country.

a. Is the treatment works located in Indian Country?

_____ Yes ✓ No

b. Does the treatment works discharge to a receiving water that is either in Indian Country or that is upstream from (and eventually flows through) Indian Country?

_____ Yes ✓ No

A.6. Flow. Indicate the design flow rate of the treatment plant (i.e., the wastewater flow rate that the plant was built to handle). Also provide the average daily flow rate and maximum daily flow rate for each of the last three years. Each year's data must be based on a 12-month time period with the 12th month of "this year" occurring no more than three months prior to this application submittal.

a. Design flow rate 0.10 mgd

	Two Years Ago	Last Year	This Year
b. Annual average daily flow rate	0.019	0.020	0.022 mgd
c. Maximum daily flow rate	0.124	0.076	0.042 mgd

A.7. Collection System. Indicate the type(s) of collection system(s) used by the treatment plant. Check all that apply. Also estimate the percent contribution (by miles) of each.

✓ Separate sanitary sewer 100 %

_____ Combined storm and sanitary sewer _____ %

A.8. Discharges and Other Disposal Methods.

a. Does the treatment works discharge effluent to waters of the U.S.? ✓ Yes _____ No

If yes, list how many of each of the following types of discharge points the treatment works uses:

i. Discharges of treated effluent 1

ii. Discharges of untreated or partially treated effluent _____

iii. Combined sewer overflow points _____

iv. Constructed emergency overflows (prior to the headworks) _____

v. Other _____ _____

b. Does the treatment works discharge effluent to basins, ponds, or other surface impoundments that do not have outlets for discharge to waters of the U.S.? _____ Yes ✓ No

If yes, provide the following for each surface impoundment:

Location: _____

Annual average daily volume discharged to surface impoundment(s) _____ mgd

Is discharge _____ continuous or _____ intermittent?

c. Does the treatment works land-apply treated wastewater? _____ Yes ✓ No

If yes, provide the following for each land application site:

Location: _____

Number of acres: _____

Annual average daily volume applied to site: _____ Mgd

Is land application _____ continuous or _____ intermittent?

d. Does the treatment works discharge or transport treated or untreated wastewater to another treatment works? _____ Yes ✓ No

If yes, describe the mean(s) by which the wastewater from the treatment works is discharged or transported to the other treatment works (e.g., tank truck, pipe).

N/A

If transport is by a party other than the applicant, provide:

Transporter name: _____

Mailing Address: _____

_____

Contact person: _____

Title: _____

Telephone number: _____

For each treatment works that receives this discharge, provide the following:

Name: N/A

Mailing Address: _____

_____

Contact person: _____

Title: _____

Telephone number: _____

If known, provide the NPDES permit number of the treatment works that receives this discharge. _____

Provide the average daily flow rate from the treatment works into the receiving facility. _____ mgd

e. Does the treatment works discharge or dispose of its wastewater in a manner not included in A.8.a through A.8.d above (e.g., underground percolation, well injection)? _____ Yes ✓ No

If yes, provide the following for each disposal method:

Description of method (including location and size of site(s) if applicable):

_____

Annual daily volume disposed of by this method: _____

Is disposal through this method _____ continuous or _____ intermittent?

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A.11. Description of Treatment.

a. What levels of treatment are provided? Check all that apply.

_____ Primary ✓ Secondary

_____ Advanced _____ Other. Describe: 0.1 MGD Extended Aeration Package Plant

b. Indicate the following removal rates (as applicable):

Design BOD_5 removal or Design $CBOD_5$ removal	91.7	%
Design SS removal	87.5	%
Design P removal	N/A	%
Design N removal	87.5	%
Other _____	_____	%

c. What type of disinfection is used for the effluent from this outfall? If disinfection varies by season, please describe.

UV Disinfection

If disinfection is by chlorination, is dechlorination used for this outfall? _____ Yes _____ No

d. Does the treatment plant have post aeration? ✓ Yes _____ No

A.12. Effluent Testing Information. All Applicants that discharge to waters of the US must provide effluent testing data for the following parameters. Provide the indicated effluent testing required by the permitting authority for each outfall through which effluent is discharged. Do not include information on combined sewer overflows in this section. All information reported must be based on data collected through analysis conducted using 40 CFR Part 136 methods. In addition, this data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136. At a minimum, effluent testing data must be based on at least three samples and must be no more than four and one-half years apart.

Outfall number: 001 SEE ATTACHMENT #1

PARAMETER	MAXIMUM DAILY VALUE		AVERAGE DAILY VALUE		
	Value	Units	Value	Units	Number of Samples
pH (Minimum)	6.73	s.u.			
pH (Maximum)	8.33	s.u.			
Flow Rate	0.124	MGD	0.019	MGD	1095
Temperature (Winter)	15	oC	10	oC	120
Temperature (Summer)	26	oC	19	oC	245

* For pH please report a minimum and a maximum daily value

POLLUTANT		MAXIMUM DAILY DISCHARGE		AVERAGE DAILY DISCHARGE			ANALYTICAL METHOD	ML / MDL
		Conc.	Units	Conc.	Units	Number of Samples		
CONVENTIONAL AND NONCONVENTIONAL COMPOUNDS.								
BIOCHEMICAL OXYGEN	BOD-5	28	mg/L	5.1	mg/L	468	SM 5210-B	5 mg/L
DEMAND (Report one)	CBOD-5							
FECAL COLIFORM		631	N/CML	74	N/CML	156	E 10029	2 N/CML
TOTAL SUSPENDED SOLIDS (TSS)		17	mg/L	7.4	mg/L	468	EPA 160.2	1 mg/L

END OF PART A.
REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE

BASIC APPLICATION INFORMATION

PART B. ADDITIONAL APPLICATION INFORMATION FOR APPLICANTS WITH A DESIGN FLOW GREATER THAN OR EQUAL TO 0.1 MGD (100,000 gallons per day).

All applicants with a design flow rate ≥ 0.1 mgd must answer questions B.1 through B.6. All others go to Part C (Certification).

B.1. Inflow and Infiltration. Estimate the average number of gallons per day that flow into the treatment works from inflow and/or infiltration.

<1000 gpd

Briefly explain any steps underway or planned to minimize inflow and infiltration.

Manhole inspections and repairs as needed. Work began January 2008.

SEE ATTACHMENT # 2

B.2. Topographic Map. Attach to this application a topographic map of the area extending at least one mile beyond facility property boundaries. This map must show the outline of the facility and the following information. (You may submit more than one map if one map does not show the entire area.)

a. The area surrounding the treatment plant, including all unit processes.

b. The major pipes or other structures through which wastewater enters the treatment works and the pipes or other structures through which treated wastewater is discharged from the treatment plant. Include outfalls from bypass piping, if applicable.

c. Each well where wastewater from the treatment plant is injected underground.

d. Wells, springs, other surface water bodies, and drinking water wells that are: 1) within 1/4 mile of the property boundaries of the treatment works, and 2) listed in public record or otherwise known to the applicant.

e. Any areas where the sewage sludge produced by the treatment works is stored, treated, or disposed.

f. If the treatment works receives waste that is classified as hazardous under the Resource Conservation and Recovery Act (RCRA) by truck, rail, or special pipe, show on the map where that hazardous waste enters the treatment works and where it is treated, stored, and/or disposed.

B.3. Process Flow Diagram or Schematic. Provide a diagram showing the processes of the treatment plant, including all bypass piping and all backup power sources or redundancy in the system. Also provide a water balance showing all treatment units, including disinfection (e.g, chlorination and dechlorination). The water balance must show daily average flow rates at influent and discharge points and approximate daily flow rates between treatment units. Include a brief narrative description of the diagram. SEE ATTACHMENT # 2

B.4. Operation/Maintenance Performed by Contractor(s).

Are any operational or maintenance aspects (related to wastewater treatment and effluent quality) of the treatment works the responsibility of a contractor? ____Yes ✓ No

If yes, list the name, address, telephone number, and status of each contractor and describe the contractor's responsibilities (attach additional pages if necessary).

Name: _____

Mailing Address: _____

_____

Telephone Number: _____

Responsibilities of Contractor: _____

B.5. Scheduled Improvements and Schedules of Implementation. Provide information on any uncompleted implementation schedule or uncompleted plans for improvements that will affect the wastewater treatment, effluent quality, or design capacity of the treatment works. If the treatment works has several different implementation schedules or is planning several improvements, submit separate responses to question B.5 for each. (If none, go to question B.6.)

a. List the outfall number (assigned in question A.9) for each outfall that is covered by this implementation schedule.

N/A

b. Indicate whether the planned improvements or implementation schedule are required by local, State, or Federal agencies.

____Yes ____No

c If the answer to B.5.b is "Yes," briefly describe, including new maximum daily inflow rate (if applicable).

N/A

d. Provide dates imposed by any compliance schedule or any actual dates of completion for the implementation steps listed below, as applicable. For improvements planned independently of local, State, or Federal agencies, indicate planned or actual completion dates, as applicable. Indicate dates as accurately as possible.

Implementation Stage	Schedule MM / DD / YYYY	Actual Completion MM / DD / YYYY
– Begin construction	___/___/_____	___/___/_____
– End construction	___/___/_____	___/___/_____
– Begin discharge	___/___/_____	___/___/_____
– Attain operational level	___/___/_____	___/___/_____

e. Have appropriate permits/clearances concerning other Federal/State requirements been obtained? ____Yes ____No

Describe briefly: _____

B.6. EFFLUENT TESTING DATA (GREATER THAN 0.1 MGD ONLY).

Applicants that discharge to waters of the US must provide effluent testing data for the following parameters. Provide the indicated effluent testing required by the permitting authority for each outfall through which effluent is discharged. Do not include information on combined sewer overflows in this section. All information reported must be based on data collected through analysis conducted using 40 CFR Part 136 methods. In addition, this data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136. At a minimum, effluent testing data must be based on at least three pollutant scans and must be no more than four and one-half years old.

Outfall Number: 001 SEE ATTACHMENT # 3

POLLUTANT	MAXIMUM DAILY DISCHARGE		AVERAGE DAILY DISCHARGE			ANALYTICAL METHOD	ML / MDL
	Conc.	Units	Conc.	Units	Number of Samples		
CONVENTIONAL AND NONCONVENTIONAL COMPOUNDS.							
AMMONIA (as N)	0.11	mg/L	0.11	mg/L	1	SM 4500NH3,F	0.1 mg/L
CHLORINE (TOTAL RESIDUAL, TRC)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
DISSOLVED OXYGEN	12.3	mg/L	9.4	mg/L	365	SM 4500-O	0.1 mg/L
TOTAL KJELDAHL NITROGEN (TKN)	7.0	mg/L	1.2	mg/L	183	SM 4500-Norg-C	0.5 mg/L
NITRATE PLUS NITRITE NITROGEN	41.0	mg/L	41	mg/L	1	SM 4500NH3-H	1.0 mg/L
OIL and GREASE	<5	mg/L	<5	mg/L	1	EPA 1664-A	5.0 mg/L
PHOSPHORUS (Total)	1.75	mg/L	1.75	mg/L	1	SM 4500 P,E	0.25 mg/L
TOTAL DISSOLVED SOLIDS (TDS)	527	mg/L	527	mg/L	1	SM 2540-C	4.0 mg/L
OTHER	See	attached	data	sheets for	Zinc and	Hardness	

END OF PART B.
REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE

FACILITY NAME AND PERMIT NUMBER:
Riner STP Permit No. VA0024040

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BASIC APPLICATION INFORMATION

PART C. CERTIFICATION

All applicants must complete the Certification Section. Refer to instructions to determine who is an officer for the purposes of this certification. All applicants must complete all applicable sections of Form 2A, as explained in the Application Overview. Indicate below which parts of Form 2A you have completed and are submitting. By signing this certification statement, applicants confirm that they have reviewed Form 2A and have completed all sections that apply to the facility for which this application is submitted.

Indicate which parts of Form 2A you have completed and are submitting:

✓ Basic Application Information packet

Supplemental Application Information packet:

_____ Part D (Expanded Effluent Testing Data)

_____ Part E (Toxicity Testing: Biomonitoring Data)

_____ Part F (Industrial User Discharges and RCRA/CERCLA Wastes)

_____ Part G (Combined Sewer Systems)

ALL APPLICANTS MUST COMPLETE THE FOLLOWING CERTIFICATION.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name and official title: Robert C. Frank, PSA Director

Signature: [signature]

Telephone number: 540-381-1997

Date signed: May 8, 2008

RECEIVED
MAY 09 2008
DEQ-WCRO

Upon request of the permitting authority, you must submit any other information necessary to assess wastewater treatment practices at the treatment works or identify appropriate permitting requirements.

SEND COMPLETED FORMS TO:

SUPPLEMENTAL APPLICATION INFORMATION

PART D. EXPANDED EFFLUENT TESTING DATA

Refer to the directions on the cover page to determine whether this section applies to the treatment works.

Effluent Testing: 1.0 mgd and Pretreatment Treatment Works. If the treatment works has a design flow greater than or equal to 1.0 mgd or it has (or is required to have) a pretreatment program, or is otherwise required by the permitting authority to provide the data, then provide effluent testing data for the following pollutants. Provide the indicated effluent testing information and any other information required by the permitting authority for each outfall through which effluent is discharged. Do not include information on combined sewer overflows in this section. All information reported must be based on data collected through analyses conducted using 40 CFR Part 136 methods. In addition, these data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136. Indicate in the blank rows provided below any data you may have on pollutants not specifically listed in this form. At a minimum, effluent testing data must be based on at least three pollutant scans and must be no more than four and one-half years old.

Outfall number: _____ (Complete once for each outfall discharging effluent to waters of the United States.)

POLLUTANT	MAXIMUM DAILY DISCHARGE				AVERAGE DAILY DISCHARGE					ANALYTICAL METHOD	ML/ MDL
	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples		
METALS (TOTAL RECOVERABLE), CYANIDE, PHENOLS, AND HARDNESS.											
ANTIMONY											
ARSENIC											
BERYLLIUM											
CADMIUM											
CHROMIUM											
COPPER											
LEAD											
MERCURY											
NICKEL											
SELENIUM											
SILVER											
THALLIUM											
ZINC											
CYANIDE											
TOTAL PHENOLIC COMPOUNDS											
HARDNESS (AS $CaCO_3$)											
Use this space (or a separate sheet) to provide information on other metals requested by the permit writer.											

FACILITY NAME AND PERMIT NUMBER:		
Riner STP	VA0024040	N/A

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Outfall number: _____ (Complete once for each outfall discharging effluent to waters of the United States.)

POLLUTANT	MAXIMUM DAILY DISCHARGE				AVERAGE DAILY DISCHARGE					ANALYTICAL METHOD	ML/ MDL
	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples		
VOLATILE ORGANIC COMPOUNDS.											
ACROLEIN											
ACRYLONITRILE											
BENZENE											
BROMOFORM											
CARBON TETRACHLORIDE											
CLOROBENZENE											
CHLORODIBROMO-METHANE											
CHLOROETHANE											
2-CHLORO-ETHYLVINYL ETHER											
CHLOROFORM											
DICHLOROBROMO-METHANE											
1,1-DICHLOROETHANE											
1,2-DICHLOROETHANE											
TRANS-1,2-DICHLORO-ETHYLENE											
1,1-DICHLOROETHYLENE											
1,2-DICHLOROPROPANE											
1,3-DICHLORO-PROPYLENE											
ETHYLBENZENE											
METHYL BROMIDE											
METHYL CHLORIDE											
METHYLENE CHLORIDE											
1,1,2,2-TETRACHLORO-ETHANE											
TETRACHLORO-ETHYLENE											
TOLUENE											

FACILITY NAME AND PERMIT NUMBER:
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Outfall number: _____ (Complete once for each outfall discharging effluent to waters of the United States.)

POLLUTANT	MAXIMUM DAILY DISCHARGE				AVERAGE DAILY DISCHARGE					ANALYTICAL METHOD	ML/ MDL
	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples		
1,1,1-TRICHLOROETHANE											
1,1,2-TRICHLOROETHANE											
TRICHLORETHYLENE											
VINYL CHLORIDE											
Use this space (or a separate sheet) to provide information on other volatile organic compounds requested by the permit writer.											
ACID-EXTRACTABLE COMPOUNDS											
P-CHLORO-M-CRESOL											
2-CHLOROPHENOL											
2,4-DICHLOROPHENOL											
2,4-DIMETHYLPHENOL											
4,6-DINITRO-O-CRESOL											
2,4-DINITROPHENOL											
2-NITROPHENOL											
4-NITROPHENOL											
PENTACHLOROPHENOL											
PHENOL											
2,4,6-TRICHLOROPHENOL											
Use this space (or a separate sheet) to provide information on other acid-extractable compounds requested by the permit writer.											
BASE-NEUTRAL COMPOUNDS.											
ACENAPHTHENE											
ACENAPHTHYLENE											
ANTHRACENE											
BENZIDINE											
BENZO(A)ANTHRACENE											
BENZO(A)PYRENE											

FACILITY NAME AND PERMIT NUMBER:
Riner STP VA0024040 N/A

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Outfall number: _____ (Complete once for each outfall discharging effluent to waters of the United States.)

POLLUTANT	MAXIMUM DAILY DISCHARGE				AVERAGE DAILY DISCHARGE					ANALYTICAL METHOD	ML/ MDL
	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples		
3,4 BENZO-FLUORANTHENE											
BENZO(GHI)PERYLENE											
BENZO(K)FLUORANTHENE											
BIS (2-CHLOROETHOXY) METHANE											
BIS (2-CHLOROETHYL)-ETHER											
BIS (2-CHLOROISO-PROPYL) ETHER											
BIS (2-ETHYLHEXYL) PHTHALATE											
4-BROMOPHENYL PHENYL ETHER											
BUTYL BENZYL PHTHALATE											
2-CHLORONAPHTHALENE											
4-CHLORPHENYL PHENYL ETHER											
CHRYSENE											
DI-N-BUTYL PHTHALATE											
DI-N-OCTYL PHTHALATE											
DIBENZO(A,H) ANTHRACENE											
1,2-DICHLOROBENZENE											
1,3-DICHLOROBENZENE											
1,4-DICHLOROBENZENE											
3,3-DICHLOROBENZIDINE											
DIETHYL PHTHALATE											
DIMETHYL PHTHALATE											
2,4-DINITROTOLUENE											
2,6-DINITROTOLUENE											
1,2-DIPHENYLHYDRAZINE											

FACILITY NAME AND PERMIT NUMBER:		
Riner STP	VA0024040	N/A

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Outfall number: _____ (Complete once for each outfall discharging effluent to waters of the United States.)

POLLUTANT	MAXIMUM DAILY DISCHARGE				AVERAGE DAILY DISCHARGE					ANALYTICAL METHOD	ML/ MDL
	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples		
FLUORANTHENE											
FLUORENE											
HEXACHLOROBENZENE											
HEXACHLOROBUTADIENE											
HEXACHLOROCYCLO-PENTADIENE											
HEXACHLOROETHANE											
INDENO(1,2,3-CD)PYRENE											
ISOPHORONE											
NAPHTHALENE											
NITROBENZENE											
N-NITROSODI-N-PROPYLAMINE											
N-NITROSODI- METHYLAMINE											
N-NITROSODI-PHENYLAMINE											
PHENANTHRENE											
PYRENE											
1,2,4-TRICHLOROBENZENE											
Use this space (or a separate sheet) to provide information on other base-neutral compounds requested by the permit writer.											
Use this space (or a separate sheet) to provide information on other pollutants (e.g., pesticides) requested by the permit writer.											

END OF PART D.
REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE

SUPPLEMENTAL APPLICATION INFORMATION

PART E. TOXICITY TESTING DATA

POTWs meeting one or more of the following criteria must provide the results of whole effluent toxicity tests for acute or chronic toxicity for each of the facility's discharge points: 1) POTWs with a design flow rate greater than or equal to 1.0 mgd; 2) POTWs with a pretreatment program (or those that are required to have one under 40 CFR Part 403); or 3) POTWs required by the permitting authority to submit data for these parameters.

- At a minimum, these results must include quarterly testing for a 12-month period within the past 1 year using multiple species (minimum of two species), or the results from four tests performed at least annually in the four and one-half years prior to the application, provided the results show no appreciable toxicity, and testing for acute and/or chronic toxicity, depending on the range of receiving water dilution. Do not include information on combined sewer overflows in this section. All information reported must be based on data collected through analysis conducted using 40 CFR Part 136 methods. In addition, this data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136.
- In addition, submit the results of any other whole effluent toxicity tests from the past four and one-half years. If a whole effluent toxicity test conducted during the past four and one-half years revealed toxicity, provide any information on the cause of the toxicity or any results of a toxicity reduction evaluation, if one was conducted.
- If you have already submitted any of the information requested in Part E, you need not submit it again. Rather, provide the information requested in question E.4 for previously submitted information. If EPA methods were not used, report the reasons for using alternate methods. If test summaries are available that contain all of the information requested below, they may be submitted in place of Part E.

If no biomonitoring data is required, do not complete Part E. Refer to the Application Overview for directions on which other sections of the form to complete.

E.1. Required Tests.

Indicate the number of whole effluent toxicity tests conducted in the past four and one-half years.

____chronic ____acute

E.2. Individual Test Data. Complete the following chart for each whole effluent toxicity test conducted in the last four and one-half years. Allow one column per test (where each species constitutes a test). Copy this page if more than three tests are being reported.

Test number:_____ Test number:_____ Test number:_____

a. Test information.			
Test species & test method number			
Age at initiation of test			
Outfall number			
Dates sample collected			
Date test started			
Duration			
b. Give toxicity test methods followed.			
Manual title			
Edition number and year of publication			
Page number(s)			
c. Give the sample collection method(s) used. For multiple grab samples, indicate the number of grab samples used.			
24-Hour composite			
Grab			
d. Indicate where the sample was taken in relation to disinfection. (Check all that apply for each)			
Before disinfection			
After disinfection			
After dechlorination			

FACILITY NAME AND PERMIT NUMBER:		
Riner STP VA0024040	N/A	

Form Approved 1/14/99
OMB Number 2040-0086

	Test number:_____	Test number:_____	Test number:_____
e. Describe the point in the treatment process at which the sample was collected.			
Sample was collected:			
f. For each test, include whether the test was intended to assess chronic toxicity, acute toxicity, or both.			
Chronic toxicity			
Acute toxicity			
g. Provide the type of test performed.			
Static			
Static-renewal			
Flow-through			
h. Source of dilution water. If laboratory water, specify type; if receiving water, specify source.			
Laboratory water			
Receiving water			
i. Type of dilution water. It salt water, specify "natural" or type of artificial sea salts or brine used.			
Fresh water			
Salt water			
j. Give the percentage effluent used for all concentrations in the test series.			
k. Parameters measured during the test. (State whether parameter meets test method specifications)			
pH			
Salinity			
Temperature			
Ammonia			
Dissolved oxygen			
l. Test Results.			
Acute:			
Percent survival in 100% effluent	%	%	%
LC_{50}			
95% C.I.	%	%	%
Control percent survival	%	%	%
Other (describe)			

Chronic:			
NOEC	%	%	%
IC_{25}	%	%	%
Control percent survival	%	%	%
Other (describe)			

m. Quality Control/Quality Assurance.

Is reference toxicant data available?			
Was reference toxicant test within acceptable bounds?			
What date was reference toxicant test run (MM/DD/YYYY)?			
Other (describe)			

E.3. Toxicity Reduction Evaluation. Is the treatment works involved in a Toxicity Reduction Evaluation?

____Yes____No If yes, describe: _____

_____

_____

E.4. Summary of Submitted Biomonitoring Test Information. If you have submitted biomonitoring test information, or information regarding the cause of toxicity, within the past four and one-half years, provide the dates the information was submitted to the permitting authority and a summary of the results.

Date submitted: _____ (MM/DD/YYYY)

Summary of results: (see instructions)

_____

_____

END OF PART E.
REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE.

SUPPLEMENTAL APPLICATION INFORMATION

PART F. INDUSTRIAL USER DISCHARGES AND RCRA/CERCLA WASTES

All treatment works receiving discharges from significant industrial users or which receive RCRA, CERCLA, or other remedial wastes must complete Part F.

GENERAL INFORMATION:

F.1. Pretreatment Program. Does the treatment works have, or is it subject to, an approved pretreatment program?

____Yes____No

F.2. Number of Significant Industrial Users (SIUs) and Categorical Industrial Users (CIUs). Provide the number of each of the following types of industrial users that discharge to the treatment works.

a. Number of non-categorical SIUs. _____

b. Number of CIUs. _____

SIGNIFICANT INDUSTRIAL USER INFORMATION:

Supply the following information for each SIU. If more than one SIU discharges to the treatment works, copy questions F.3 through F.8 and provide the information requested for each SIU.

F.3. Significant Industrial User Information. Provide the name and address of each SIU discharging to the treatment works. Submit additional pages as necessary.

Name: _____

Mailing Address: _____

_____

F.4. Industrial Processes. Describe all of the industrial processes that affect or contribute to the SIU's discharge.

_____

F.5. Principal Product(s) and Raw Material(s). Describe all of the principal processes and raw materials that affect or contribute to the SIU's discharge.

Principal product(s): _____

Raw material(s): _____

F.6. Flow Rate.

a. Process wastewater flow rate. Indicate the average daily volume of process wastewater discharged into the collection system in gallons per day (gpd) and whether the discharge is continuous or intermittent.

_____ gpd (_____continuous or _____intermittent)

b. Non-process wastewater flow rate. Indicate the average daily volume of non-process wastewater flow discharged into the collection system in gallons per day (gpd) and whether the discharge is continuous or intermittent.

_____ gpd (_____continuous or _____intermittent)

F.7. Pretreatment Standards. Indicate whether the SIU is subject to the following:

a. Local limits ____Yes ____No

b. Categorical pretreatment standards ____Yes ____No

If subject to categorical pretreatment standards, which category and subcategory?

_____

F.8. Problems at the Treatment Works Attributed to Waste Discharged by the SIU. Has the SIU caused or contributed to any problems (e.g., upsets, interference) at the treatment works in the past three years?

____Yes____No If yes, describe each episode.

_____

_____

RCRA HAZARDOUS WASTE RECEIVED BY TRUCK, RAIL, OR DEDICATED PIPELINE:

F.9. RCRA Waste. Does the treatment works receive or has it in the past three years received RCRA hazardous waste by truck, rail, or dedicated pipe? ____Yes ___No (go to F.12.)

F.10. Waste Transport. Method by which RCRA waste is received (check all that apply):

_____Truck _____Rail _____Dedicated Pipe

F.11. Waste Description. Give EPA hazardous waste number and amount (volume or mass, specify units).

EPA Hazardous Waste Number	Amount	Units

CERCLA (SUPERFUND) WASTEWATER, RCRA REMEDIATION/CORRECTIVE ACTION WASTEWATER, AND OTHER REMEDIAL ACTIVITY WASTEWATER:

F.12. Remediation Waste. Does the treatment works currently (or has it been notified that it will) receive waste from remedial activities?

____Yes (complete F.13 through F.15.) ____No

Provide a list of sites and the requested information (F.13 - F.15.) for each current and future site.

F.13. Waste Origin. Describe the site and type of facility at which the CERCLA/RCRA/or other remedial waste originates (or is expected to originate in the next five years).

_____

_____

_____

F.14. Pollutants. List the hazardous constituents that are received (or are expected to be received). Include data on volume and concentration, if known. (Attach additional sheets if necessary).

_____

_____

F.15. Waste Treatment.

a. Is this waste treated (or will it be treated) prior to entering the treatment works?

____Yes ____No

If yes, describe the treatment (provide information about the removal efficiency):

_____

_____

b. Is the discharge (or will the discharge be) continuous or intermittent?

____Continuous ____Intermittent If intermittent, describe discharge schedule.

_____

END OF PART F.
REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE

SUPPLEMENTAL APPLICATION INFORMATION

PART G. COMBINED SEWER SYSTEMS

If the treatment works has a combined sewer system, complete Part G.

G.1. System Map. Provide a map indicating the following: (may be included with Basic Application Information)

a. All CSO discharge points.

b. Sensitive use areas potentially affected by CSOs (e.g., beaches, drinking water supplies, shellfish beds, sensitive aquatic ecosystems, and outstanding natural resource waters).

c. Waters that support threatened and endangered species potentially affected by CSOs.

G.2. System Diagram. Provide a diagram, either in the map provided in G.1. or on a separate drawing, of the combined sewer collection system that includes the following information:

a. Locations of major sewer trunk lines, both combined and separate sanitary.

b. Locations of points where separate sanitary sewers feed into the combined sewer system.

c. Locations of in-line and off-line storage structures.

d. Locations of flow-regulating devices.

e. Locations of pump stations.

CSO OUTFALLS:

Complete questions G.3 through G.6 once for each CSO discharge point.

G.3. Description of Outfall.

a. Outfall number _____

b. Location

_____
(City or town, if applicable) (Zip Code)

_____
(County) (State)

_____
(Latitude) (Longitude)

c. Distance from shore (if applicable) _____ ft.

d. Depth below surface (if applicable) _____ ft.

e. Which of the following were monitored during the last year for this CSO?

____Rainfall ____CSO pollutant concentrations ____CSO frequency

____CSO flow volume ____Receiving water quality

f. How many storm events were monitored during the last year? _____

G.4. CSO Events.

a. Give the number of CSO events in the last year.

_____ events (___ actual or ___ approx.)

b. Give the average duration per CSO event.

_____ hours (____ actual or ____ approx.)

c. Give the average volume per CSO event.

_____ million gallons (_____ actual or _____ approx.)

d. Give the minimum rainfall that caused a CSO event in the last year.

_____ inches of rainfall

G.5. Description of Receiving Waters.

a. Name of receiving water: _____

b. Name of watershed/river/stream system: _____

United States Soil Conservation Service 14-digit watershed code (if known): _____

c. Name of State Management/River Basin: _____

United States Geological Survey 8-digit hydrologic cataloging unit code (if known): _____

G.6. CSO Operations.

Describe any known water quality impacts on the receiving water caused by this CSO (e.g., permanent or intermittent beach closings, permanent or intermittent shell fish bed closings, fish kills, fish advisories, other recreational loss, or violation of any applicable State water quality standard).

_____

_____

END OF PART G.
REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE.

VPDES PERMIT APPLICATION ADDENDUM - SUPPLEMENTARY INFORMATION

A. General Information

1. Entity to whom the permit is to be issued: Montgomery County Public Service Authority
2. Montgomery County Public Service Authority
Who will be legally responsible for the wastewater treatment facilities and compliance with the permit? This may or may not be the facility or property owner.

2. Classify the discharge as one of the following by checking the appropriate line:

__X__ a. Existing discharge

____ b. Proposed discharge

____ c. Proposed expansion of an existing discharge

B. Location

1. Is this facility located within city or town boundaries? No

2. (New Issuances & Modifications Only) What is the tax map parcel number for the land where this facility is located? 035261

3. For the facility to be covered by this permit, how many acres will be disturbed during the next five years due to new construction activities? 0

4. What is the total acreage of the property on which the treatment plant is located? 1.756 acres

5. Give the minimum elevation of the treatment plant site. 2012 feet

6. Flood elevations of the treatment plant site:
25 year flood 2016 Est. feet
100 year flood 2034 feet

7. Attach to the back of this application a location map(s) which may be traced from or is/are a production of a U.S. Geological Survey topographic quadrangle(s) or other appropriately scaled contour map(s). The location map(s) shall show the following: SEE ATTACHMENT # 2

a. Treatment Plant
b. Discharge point
c. Receiving waters
d. Boundaries of the property on which the treatment plant is located, or to be located.
e. Distance from the treatment plant to the nearest: (Indicate "not applicable" for any distance greater than 2000 feet)
   i. Residence
   ii. Distribution line for potable water supply
   iii. Reservoir, well, or other source of water supply
   iv. Recreational area
f. Distance from the discharge point to the nearest:
(Indicate "not applicable" for any distance greater than 15 miles)
   i. Downstream community
   ii. Upstream and downstream water intake points
   iii. Shellfishing waters
   iv. Wetlands area
   v. Downstream impoundment

vi. Downstream recreational area

C. Discharge Description

1. Provide a brief description of the wastewater treatment scheme. Also, attach to the back of this application, a process flow diagram showing each process unit of the treatment plant, including all bypass piping and all backup power sources or redundancy in the system. SEE ATTACHMENT # 2

2. What is the design average flow of this facility? 0.10 MGD
Industrial facilities: What is the max. 30-day avg. production level (include units)? NA

3. In addition to the above design flow or production level, should the permit be written with limits for any other discharge flow tiers or production levels? No

If "Yes", please specify the other flow tiers (in MGD) or production levels: _____
Please consider: Is your facility's design flow considerably greater than your current flow? Do you plan to expand operations during the next five years?

4. Nature of operations generating wastewater: All domestic sewage

95 % of flow from domestic connections/sources
Number of private residences to be served by the wastewater treatment facilities:
__ 0 __ 1-49 _X_ 50 or more

__5__% of flow from non-domestic connections/sources

5. Mode of discharge: _X_ Continuous __ Intermittent __ Seasonal
Describe frequency and duration of intermittent or seasonal discharges:
_____

6. Identify the characteristics of the receiving stream at the point just above the facility's discharge point:
_X_ Permanent stream, never dry
__ Intermittent stream, usually flowing, sometimes dry
__ Ephemeral stream, wet-weather flow, often dry
__ Effluent-dependent stream, usually or always dry
__ Lake or pond at or below the discharge point
__ Other: _____

E. Anticipated Phasing Schedule for Plant Capacity - Proposed / Expanding Discharges

If this application is for a proposed or expanded discharge(s), complete the phasing schedule below beginning with the year in which construction completion is anticipated and progressing in increments of 5 years for 30 years thereafter.

Proposed Design Capacity: _____NA_____ MGD

Anticipated Date of Construction Completion: _____, _____
Month Year

Years after Completion	Projected Flow (MGD)
0	
5	
10	
15	
20	
25	
30	

F. Interim Facilities NA

Are the wastewater treatment facilities interim? (designed for a useful life of less than 5 years)

_____ Yes_____ No

If so, provide the estimated date to be discontinued (month, year) _____ , and the name and location of the intended replacement facility.

_____
Name / Location

FACILITY NAME: RINER STP VPDES PERMIT NUMBER: VA0024040

VPDES SEWAGE SLUDGE PERMIT APPLICATION FORM

SCREENING INFORMATION

This application is divided into four sections. Section A pertains to all applicants. The applicability of Sections B, C and D depends on your facility's sewage sludge use or disposal practices. The information provided on this page will help you determine which sections to fill out.

1. All applicants must complete Section A (General Information).

2. Does this facility generate sewage sludge? ✓ Yes ____ No

   Does this facility derive a material from sewage sludge? ____ Yes ✓ No

   If you answered "Yes" to either, complete Section B (Generation Of Sewage Sludge or Preparation Of A Material Derived From Sewage Sludge).

3. Does this facility apply sewage sludge to the land? ____ Yes ✓ No

   Is sewage sludge from this facility applied to the land? ✓ Yes ____ No

   If you answer "No" to all above, skip Section C.

   If you answered "Yes" to either, answer the following three questions:

   a. Does the sewage sludge from this facility meet the ceiling concentrations, pollutant concentrations, Class A pathogen reduction requirements and one of the vector attraction reduction requirements 1-8, as identified in the instructions? ____ Yes ✓ No

   b. Is sewage sludge from this facility placed in a bag or other container for sale or give-away for application to the land? ____ Yes ✓ No

   c. Is sewage sludge from this facility sent to another facility for treatment or blending? ✓ Yes ____ No

   If you answered "No" to all three, complete Section C (Land Application Of Bulk Sewage Sludge).

   If you answered "Yes" to a, b or c, skip Section C.

4. Do you own or operate a surface disposal site? ____ Yes ✓ No

   If "Yes", complete Section D (Surface Disposal).

FACILITY NAME: RINER STP VPDES PERMIT NUMBER: VA0024040

SECTION A. GENERAL INFORMATION

All applicants must complete this section.

1. **Facility Information.**
   a. Facility name: RINER STP
   b. Contact person: BRUCE R. JONES
      Title: WATER/WASTEWATER SUPERVISOR
      Phone: (540) 268-5143
   c. Mailing address:
      Street or P.O. Box: 755 ROANOKE ST., SUITE 2-I
      City or Town: Christiansburg State: VA. Zip: 24073
   d. Facility location:
      Street or Route #: 4351 RINER Rd.
      County: MONTGOMERY
      City or Town: RINER State: VA. Zip: 24149
   e. Is this facility a Class I sludge management facility? ____ Yes ✓ No
   f. Facility design flow rate: 0.10 mgd
   g. Total population served: 250
   h. Indicate the type of facility:
      ✓ Publicly owned treatment works (POTW)
      ____ Privately owned treatment works
      ____ Federally owned treatment works
      ____ Blending or treatment operation
      ____ Surface disposal site
      ____ Other (describe):

2. **Applicant Information.** If the applicant is different from the above, provide the following:
   a. Applicant name: Montgomery County Public Service Authority
   b. Mailing address:
      Street or P.O. Box: 755 ROANOKE ST., SUITE 2-I
      City or Town: Christiansburg State: VA. Zip: 24073
   c. Contact person: BRUCE R. JONES
      Title: WATER/WASTEWATER SUPERVISOR
      Phone: (540) 268-5143
   d. Is the applicant the owner or operator (or both) of this facility?
      ✓ owner ✓ operator
   e. Should correspondence regarding this permit be directed to the facility or the applicant?
      ____ facility ✓ applicant

3. **Permit Information.**
   a. Facility's VPDES permit number (if applicable): VA0024040
   b. List on this form or an attachment, all other federal, state or local permits or construction approvals received or applied for that regulate this facility's sewage sludge management practices:

Permit Number:	Type of Permit:

FACILITY NAME: RINER STP VPDES PERMIT NUMBER: VA0024040

4. **Indian Country.** Does any generation, treatment, storage, application to land or disposal of sewage sludge from this facility occur in Indian Country? _____ Yes ✓ No If "Yes", describe:

5. **Topographic Map.** Provide a topographic map or maps (or other appropriate maps if a topographic map is unavailable) that shows the following information. Maps should include the area one mile beyond all property boundaries of the facility: SEE ATTACHMENT # 4
   a. Location of all sewage sludge management facilities, including locations where sewage sludge is generated, stored, treated, or disposed.
   b. Location of all wells, springs, and other surface water bodies listed in public records or otherwise known to the applicant within 1/4 mile of the property boundaries.

6. **Line Drawing.** Provide a line drawing and/or a narrative description that identifies all sewage sludge processes that will be employed during the term of the permit including all processes used for collecting, dewatering, storing, or treating sewage sludge, the destination(s) of all liquids and solids leaving each unit, and all methods used for pathogen reduction and vector attraction reduction. SEE ATTACHMENT # 5

7. **Contractor Information.** Are any operational or maintenance aspects of this facility related to sewage sludge generation, treatment, use or disposal the responsibility of a contractor? _____ Yes ✓ No

   If "Yes", provide the following for each contractor (attach additional pages if necessary).

   Name: _____

   Mailing address:

   Street or P.O. Box: _____

   City or Town: _____ State: _____ Zip: _____

   Phone: (_____) _____

   Contractor's Federal, State or Local Permit Number(s) applicable to this facility's sewage sludge:

   _____

   If the contractor is responsible for the use and/or disposal of the sewage sludge, provide a description of the service to be provided to the applicant and the respective obligations of the applicant and the contractor(s).

8. **Pollutant Concentrations.** Using the table below or a separate attachment, provide sewage sludge monitoring data for the pollutants which limits in sewage sludge have been established in 9 VAC 25-31-10 et seq. for this facility's expected use or disposal practices. All data must be based on three or more samples taken at least one month apart and must be no more than four and one-half years old. SEE ATTACHMENT # 6

POLLUTANT	CONCENTRATION (mg/kg dry weight)	SAMPLE DATE	ANALYTICAL METHOD	DETECTION LEVEL FOR ANALYSIS
Arsenic	0.02	3-4-08	EPA 200.7	0.005 mg/L
Cadmium	0.04	3-4-08	EPA 200.7	0.001 mg/L
Chromium	0.19	3-4-08	EPA 200.7	0.005 mg/L
Copper	6.37	3-4-08	EPA 200.7	0.005 mg/L
Lead	0.53	3-4-08	EPA 200.7	0.005 mg/L
Mercury	0.002	3-4-08	EPA 245.1	0.0002 mg/L
Molybdenum	0.06	3-4-08	EPA 200.7	0.005 mg/L
Nickel	0.21	3-4-08	EPA 200.7	0.005 mg/L
Selenium	0.07	3-4-08	EPA 200.7	0.005 mg/L
Zinc	15.2	3-4-08	EPA 200.7	0.005 mg/L

FACILITY NAME: Riner STP **VPDES PERMIT NUMBER:** VA0024040

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name and official title Robert C. Frank, PSA Director

Signature [signature] Date Signed May 8, 2008

Telephone number 540-381-1997

RECEIVED
MAY 09 2008
DEQ-WCRO

Upon request of the department, you must submit any other information necessary to assess sewage sludge use or disposal practices at your facility or identify appropriate permitting requirements.

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MAY 09 2008
DEQ-WCRO

FACILITY NAME: RINER STP VPDES PERMIT NUMBER: VA0024040

SECTION B. GENERATION OF SEWAGE SLUDGE OR PREPARATION OF A MATERIAL DERIVED FROM SEWAGE SLUDGE

Complete this section if your facility generates sewage sludge or derives a material from sewage sludge

1. **Amount Generated On Site.**
   Total dry metric tons per 365-day period generated at your facility: 2 dry metric tons

2. **Amount Received from Off Site.** If your facility receives sewage sludge from another facility for treatment, use or disposal, provide the following information for each facility from which sewage sludge is received. If you receive sewage sludge from more than one facility, attach additional pages as necessary.
   a. Facility name: N/A
   b. Contact Person: _____
      Title: _____
      Phone: (_____) _____
   c. Mailing address:
      Street or P.O. Box: _____
      City or Town: _____ State: _____ Zip: _____
   d. Facility location: _____
      (not P.O. Box) _____
   e. Total dry metric tons per 365-day period received from this facility: _____ dry metric tons
   f. Describe, on this form or on another sheet of paper, any treatment processes known to occur at the off-site facility, including blending activities and treatment to reduce pathogens or vector attraction characteristics:

3. **Treatment Provided at Your Facility.**
   a. Which class of pathogen reduction is achieved for the sewage sludge at your facility?
      _____ Class A ✓ Class B _____ Neither or unknown
   b. Describe, on this form or another sheet of paper, any treatment processes used at your facility to reduce pathogens in sewage sludge: AEROBIC DIGESTION TO MEET THE REQUIREMENTS OF 9-VAC-25-31-560 (CLASS B - ALTERNATIVE #1) SEE ATTACHMENT # 7
   c. Which vector attraction reduction option is met for the sewage sludge at your facility?
      _____ Option 1 (Minimum 38 percent reduction in volatile solids)
      _____ Option 2 (Anaerobic process, with bench-scale demonstration)
      _____ Option 3 (Aerobic process, with bench-scale demonstration)
      ✓ Option 4 (Specific oxygen uptake rate for aerobically digested sludge)
      _____ Option 5 (Aerobic processes plus raised temperature)
      _____ Option 6 (Raise pH to 12 and retain at 11.5)
      _____ Option 7 (75 percent solids with no unstabilized solids)
      _____ Option 8 (90 percent solids with unstabilized solids)
      _____ None or unknown
   d. Describe, on this form or another sheet of paper, any treatment processes used at your facility to reduce vector attraction properties of sewage sludge: AEROBIC SLUDGE DIGESTION TO ACHIEVE AN SOUR of < 1.5 mg/oz/H/g tss
   e. Describe, on this form or another sheet of paper, any other sewage sludge treatment activities, including blending, not identified in a - d above: SLUDGE FROM RINER STP IS BLENDED WITH SLUDGE FROM ELLISTON AND SHAWSVILLE STP SLUDGE, AFTER TRANSPORT TO SHAWSVILLE STP

FACILITY NAME: RINER STP VPDES PERMIT NUMBER: VA0024040

4. **Preparation of Sewage Sludge Meeting Ceiling and Pollutant Concentrations, Class A Pathogen Requirements and One of Vector Attraction Reduction Options 1-8 (EQ Sludge).**

(If sewage sludge from your facility does not meet all of these criteria, skip Question 4.) N/A

a. Total dry metric tons per 365-day period of sewage sludge subject to this section that is applied to the land:

_____ dry metric tons

b. Is sewage sludge subject to this section placed in bags or other containers for sale or give-away?

_____ Yes _____ No

5. **Sale or Give-Away in a Bag or Other Container for Application to the Land.** N/A

(Complete this question if you place sewage sludge in a bag or other container for sale or give-away prior to land application. Skip this question if sewage sludge is covered in Question 4.)

a. Total dry metric tons per 365-day period of sewage sludge placed in a bag or other container at your facility for sale or give-away for application to the land: _____ dry metric tons

b. Attach, with this application, a copy of all labels or notices that accompany the sewage sludge being sold or given away in a bag or other container for application to the land.

6. **Shipment Off Site for Treatment or Blending.**

(Complete this question if sewage sludge from your facility is sent to another facility that provides treatment or blending. This question does not apply to sewage sludge sent directly to a land application or surface disposal site. Skip this question if the sewage sludge is covered in Questions 4 or 5. If you send sewage sludge to more than one facility, attach additional sheets as necessary.)

a. Receiving facility name: SHAWSVILLE STP

b. Facility contact: BRUCE R. JONES

Title: WATER/WASTEWATER SUPERVISOR

Phone: (540) 268-5143

c. Mailing address:

Street or P.O. Box: 755 ROANOKE ST., SUITE 2-I

City or Town: CHRISTIANSBURG State: VA. Zip: 24073

d. Total dry metric tons per 365-day period of sewage sludge provided to receiving facility:

2 dry metric tons

e. List, on this form or an attachment, the receiving facility's VPDES permit number as well as the numbers of all other federal, state or local permits that regulate the receiving facility's sewage sludge use or disposal practices:

Permit Number:	Type of Permit:
VA0024031	VPDES PERMIT
VA0024031-4	CERTIFICATE TO OPERATE

f. Does the receiving facility provide additional treatment to reduce pathogens in sewage sludge from your facility?

_____ Yes ✓ No

Which class of pathogen reduction is achieved for the sewage sludge at the receiving facility?

_____ Class A ✓ Class B _____ Neither or unknown

Describe, on this form or another sheet of paper, any treatment processes used at the receiving facility to reduce pathogens in sewage sludge: No additional pathogen reduction is achieved for RINER sludge.

g. Does the receiving facility provide additional treatment to reduce vector attraction characteristics of the sewage sludge? _____ Yes ✓ No

Which vector attraction reduction option is met for the sewage sludge at the receiving facility?

_____ Option 1 (Minimum 38 percent reduction in volatile solids)

_____ Option 2 (Anaerobic process, with bench-scale demonstration)

_____ Option 3 (Aerobic process, with bench-scale demonstration)

✓ Option 4 (Specific oxygen uptake rate for aerobically digested sludge)

_____ Option 5 (Aerobic processes plus raised temperature)

_____ Option 6 (Raise pH to 12 and retain at 11.5)

_____ Option 7 (75 percent solids with no unstabilized solids)

_____ Option 8 (90 percent solids with unstabilized solids)

_____ None unknown

Describe, on this form or another sheet of paper, any treatment processes used at the receiving facility to reduce vector attraction properties of sewage sludge: No additional vector attraction reduction is achieved for Riner sludge at Shawsville STP

h. Does the receiving facility provide any additional treatment or blending not identified in f or g above?
✓ Yes _____ No

If "Yes", describe, on this form or another sheet of paper, the treatment processes not identified in f or g above:
Riner sludge is blended with sludge from Elliston and Shawsville STP

i. If you answered "Yes" to f, g or h above, attach a copy of any information you provide to the receiving facility to comply with the "notice and necessary information" requirement of 9 VAC 25-31-530.G. SEE ATTACHMENT # 8

j Does the receiving facility place sewage sludge from your facility in a bag or other container for sale or give-away for application to the land? _____ Yes ✓ No

If "Yes", provide a copy of all labels or notices that accompany the product being sold or given away.

k. Will the sewage sludge be transported to the receiving facility in a truck-mounted watertight tank normally used for such purposes? _____ Yes ✓ No. If "No", provide description and specification on the vehicle used to transport the sewage sludge to the receiving facility.

Show the haul route(s) on a location map or briefly describe the haul route below and indicate the days of the week and the times of the day sewage sludge will be transported. SEE ATTACHMENT # 9

7. **Land Application of Bulk Sewage Sludge.** N/A

(Complete Question 7.a if sewage sludge from your facility is applied to the land, unless the sewage sludge is covered in Questions 4, 5 or 6. Complete Question 7.b, c & d only if you are responsible for land application of sewage sludge.)

a. Total dry metric tons per 365-day period of sewage sludge applied to all land application sites:

_____ dry metric tons

b. Do you identify all land application sites in Section C of this application? _____ Yes _____ No

If "No", submit a copy of the Land Application Plan (LAP) with this application (LAP should be prepared in accordance with the instructions).

c. Are any land application sites located in States other than Virginia? _____ Yes _____ No

If "Yes", describe, on this form or on another sheet of paper, how you notify the permitting authority for the States where the land application sites are located. Provide a copy of the notification.

d. Attach a copy of any information you provide to the owner or lease holder of the land application sites to comply with the "notice and necessary" information requirement of 9 VAC 25-31-530 F and/or H (Examples may be obtained in Appendix IV).

8. **Surface Disposal.** N/A

(Complete Question 8 if sewage sludge from your facility is placed on a surface disposal site.)

a. Total dry metric tons per 365-day period of sewage sludge from your facility placed on all surface disposal sites: _____ dry metric tons

b. Do you own or operate all surface disposal sites to which you send sewage sludge for disposal?
_____ Yes _____ No

If "No", answer questions c - g for each surface disposal site that you do not own or operate. If you send sewage sludge to more than one surface disposal site, attach additional pages as necessary.

c. Site name or number: _____

d. Contact person: _____

Title: _____

Phone: (_____) _____

Contact is: _____ Site Owner _____ Site operator

e. Mailing address:

Street or P.O. Box: _____

City or Town: _____ State: _____ Zip: _____

f. Total dry metric tons per 365-day period of sewage sludge from your facility placed on this surface disposal site: _____ dry metric tons

g. List, on this form or an attachment, the surface disposal site VPDES permit number as well as the numbers of all other federal, state or local permits that regulate the sewage sludge use or disposal practices at the surface disposal site:

Permit Number:	Type of Permit:
_____	_____
_____	_____

9. **Incineration.** N/A

(Complete Question 9 if sewage sludge from your facility is fired in a sewage sludge incinerator.)

a. Total dry metric tons per 365-day period of sewage sludge from your facility fired in a sewage sludge incinerator: _____ dry metric tons

b. Do you own or operate all sewage sludge incinerators in which sewage sludge from your facility is fired?
_____ Yes _____ No

If "No", answer questions c - g for each sewage sludge incinerator that you do not own or operate. If you send sewage sludge to more than one sewage sludge incinerator, attach additional pages as necessary.

c. Incinerator name or number: _____

d. Contact person: _____

Title: _____

Phone: (_____) _____

Contact is: _____ Incinerator Owner _____ Incinerator Operator

e. Mailing address:

Street or P.O. Box: _____

City or Town: _____ State: _____ Zip: _____

f. Total dry metric tons per 365-day period of sewage sludge from your facility fired in this sewage sludge incinerator: _____ dry metric tons

g. List on this form or an attachment the numbers of all other federal, state or local permits that regulate the firing

of sewage sludge at this incinerator: N/A

Permit Number:	Type of Permit:
_____	_____
_____	_____

10. Disposal in a Municipal Solid Waste Landfill. N/A

(Complete Question 10 if sewage sludge from your facility is placed on a municipal solid waste landfill. Provide the following information for each municipal solid waste landfill on which sewage sludge from your facility is placed. If sewage sludge is placed on more than one municipal solid waste landfill, attach additional pages as necessary.)

a. Landfill name: _____

b. Contact person: _____

Title: _____

Phone: (_____) _____

Contact is: _____ Landfill Owner _____ Landfill Operator

c. Mailing address:

Street or P.O. Box: _____

City or Town: _____ State: _____ Zip: _____

d. Landfill location.

Street or Route #: _____

County: _____

City or Town: _____ State: _____ Zip: _____

e. Total dry metric tons per 365-day period of sewage sludge placed in this municipal solid waste landfill:

_____ dry metric tons

f. List, on this form or an attachment, the numbers of all federal, state or local permits that regulate the operation of this municipal solid waste landfill:

Permit Number:	Type of Permit:
_____	_____
_____	_____

g. Does sewage sludge meet applicable requirements in the Virginia Solid Waste Management Regulation, 9 VAC 20-80-10 et seq., concerning the quality of materials disposed in a municipal solid waste landfill?

_____ Yes _____ No

h. Does the municipal solid waste landfill comply with all applicable criteria set forth in the Virginia Solid Waste Management Regulation, 9 VAC 20-80-10 et seq.? _____ Yes _____ No

i. Will the vehicle bed or other container used to transport sewage sludge to the municipal solid waste landfill be watertight and covered? _____ Yes _____ No

Show the haul route(s) on a location map or briefly describe the route below and indicate the days of the week and time of the day sewage sludge will be transported.

_____

_____

FACILITY NAME: RIVER STP VPDES PERMIT NUMBER: VA 0024040

SECTION C. LAND APPLICATION OF BULK SEWAGE SLUDGE N/A

Complete this section for sewage sludge that is land applied unless any of the following conditions apply:

- ***The sewage sludge meets the Table 1 ceiling concentrations, the Table 3 pollutant concentrations, Class A pathogen requirements and one of the vector attraction reduction options 1-8 (fill out B.4 instead) (EQ Sludge); or***
- ***The sewage sludge is sold or given away in a bag or other container for application to the land (fill out B.5 instead); or***
- ***You provide the sewage sludge to another facility for treatment or blending (fill out B.6 instead).***

Complete Section C for every site on which the sewage sludge that you reported in B.7 is land applied.

1. Identification of Land Application Site.

a. Site name or number: _____

b. Site location (Complete i and ii)

i. Street or Route#: _____

County: _____

City or Town: _____ State: _____ Zip: _____

ii. Latitude: _____ Longitude: _____

Method of latitude/longitude determination

_____ USGS map _____ Filed survey _____ Other

c. Topographic map. Provide a topographic map (or other appropriate map if a topographic map is unavailable) that shows the site location.

2. Owner Information.

a. Are you the owner of this land application site? _____ Yes _____ No

b. If "No", provide the following information about the owner:

Name: _____

Street or P.O. Box: _____

City or Town: _____ State: _____ Zip: _____

Phone: (_____) _____

3. Applier Information:

a. Are you the person who applies, or who is responsible for application of, sewage sludge to this land application site?
_____ Yes _____ No

b. If "No", provide the following information for the person who applies the sewage sludge:

Name: _____

Street or P.O. Box: _____

City or Town: _____ State: _____ Zip: _____

Phone: (_____) _____

c. List, on this form or an attachment, the numbers of all federal, state or local permits that regulate the person who applies sewage sludge to this land application site:

Permit Number: Type of Permit:

_____ _____

_____ _____

4. Site Type. Identify the type of land application site from among the following:

_____ Agricultural land _____ Reclamation site _____ Forest

_____ Public contact site _____ Other (describe _____

5. Vector Attraction Reduction.

Are any vector attraction reduction requirements met when sewage sludge is applied to the land application site?

_____ Yes _____ No If "Yes", answer a and b.

a. Indicate which vector attraction reduction option is met: N/A

_____ Option 9 (Injection below land surface)

_____ Option 10 (Incorporation into soil within 6 hours)

b. Describe, on this form or on another sheet of paper, any treatment processes used at the land application site to reduce the vector attraction properties of sewage sludge:

_____

_____

6. Cumulative Loadings and Remaining Allotments. N/A

(Complete Question 6 only if the sewage sludge applied to this site since July 20, 1993 is subject to the cumulative pollutant loading rates (CPLRs) - see instructions.)

a. Have you contacted DEQ or the permitting authority in the state where the sewage sludge subject to the CPLRs will be applied to ascertain whether bulk sewage sludge subject to the CPLRs has been applied to this site since July 20, 1993? _____ Yes _____ No

If "No", sewage sludge subject to the CPLRs may not be applied to this site.

If "Yes", provide the following information:

Permitting authority: _____

Contact person: _____

Phone: (_____) _____

b. Based upon this inquiry, has bulk sewage sludge subject to the CPLRs been applied to this site since July 20, 1993? _____ Yes _____ No If "No", skip the rest of Question 6. If "Yes", answer questions c - e.

c. Site size, in hectares: _____ (one hectare = 2.471 acres)

d. Provide the following information for every facility other than yours that is sending or has sent sewage sludge subject to the CPLRs to this site since July 20, 1993. If more than one such facility sends sewage sludge to this site, attach additional pages as necessary.

Facility name: _____

Facility contact: _____

Title: _____

Phone: (_____) _____

Mailing address.

Street or P.O. Box: _____

City or Town: _____ State: _____ Zip: _____

e. Provide the total loading and allotment remaining, in kg/hectare, for each of the following pollutants:

	Cumulative loading	Allotment remaining
Arsenic	_____	_____
Cadmium	_____	_____
Copper	_____	_____
Lead	_____	_____
Mercury	_____	_____
Nickel	_____	_____
Selenium	_____	_____
Zinc	_____	_____

Complete Questions 7-12 below only if you apply sewage sludge, or you are responsible for land application of sewage sludge. Information required by these questions may be prepared as attachments to this form. Skip the following questions if you contract land application to someone else (as indicated under Section A.7) who is responsible for the operation.

FACILITY NAME: RIVER STP VPDES PERMIT NUMBER: VA0024040

7. **Sludge Characterization.** Use the table below or a separate attachment, provide at least one analysis for each parameter. N/A

PCBs (mg/kg)	
pH (S. U.)	
Percent Solids (%)	
Ammonium Nitrogen (mg/kg)	
Nitrate Nitrogen (mg/kg)	
Total Kjeldahl Nitrogen (mg/kg)	
Total Phosphorus (mg/kg)	
Total Potassium (mg/kg)	
Alkalinity as $CaCO_3$* (mg/kg)	

* Lime treated sludge (10% or more lime by dry weight) should be analyzed for percent $CaCO_3$.

8. **Storage Requirements.** N/A

Existing and proposed sludge storage facilities must provide an estimated annual sludge balance on a monthly basis incorporating such factors as storage capacity, sludge production and land application schedule. Include pertinent calculations justifying storage requirements.

Proposed sludge storage facilities must also provide the following information:

a. A sludge storage site layout on a 7.5 minute topographic quadrangle or other appropriate scaled map to show the following topographic features of the surrounding landscape to a distance of 0.25 mile. Clearly mark the property line.

1) Water wells, abandoned or operating
2) Surface waters
3) Springs
4) Public water supply(s)
5) Sinkholes
6) Underground and/or surface mines
7) Mine pool (or other) surface water discharge points
8) Mining spoil piles and mine dumps
9) Quarry(s)
10) Sand and gravel pits
11) Gas and oil wells
12) Diversion ditch(s)
13) Agricultural drainage ditch(s)
14) Occupied dwellings, including industrial and commercial establishments
15) Landfills or dumps
16) Other unlined impoundments
17) Septic tanks and drainfields
18) Injection wells
19) Rock outcrops

b. A topographic map of sufficient detail to clearly show the following information:

1) Maximum and minimum percent slopes
2) Depressions on the site that may collect water
3) Drainageways that may attribute to rainfall run-on to or runoff from this site
4) Portions of the site (if any) which are located with the 100-year floodplain and how the storage facility will be protected from flooding

c. Data and specifications for the storage facility lining material.

d. Plan and cross-sectional views of the storage facility.

e. Depth from the bottom of the storage facility to the seasonal high water table and separation distance to the permanent water table.

9. **Land Area Requirements.** Provide calculations justifying the land area requirements for land application of sewage N/A

sludge taking into consideration average soil productivity group, crop(s) to be grown and most limiting factor(s) of the sewage sludge, specifically Plant Available Nitrogen (PAN), Calcium Carbonate Equivalence (CCE), and metal loadings (CPLR sewage sludge only), where applicable. Relate PAN, CCE, and metal loadings to demonstrate the most limiting factor for land application.

10. **Landowner Agreement Forms.** Provide a properly completed Sewage Sludge Application Agreement Form (attached) for each landowner if sewage sludge is to be applied onto land not owned by the applicant. N/A

11. **Ground Water Monitoring.**

Are any ground water monitoring data available for this land application site? _____ Yes _____ No N/A

If "Yes", submit the ground water monitoring data with this permit application. Also submit a written description of the well locations, approximate depth to ground water, and the ground water monitoring procedures used to obtain these data.

12. **Land Application Site Information.** N/A

(Complete Items a-d for sites receiving infrequent application - land application of sewage sludge up to the agronomic rate at a frequency of once in a 3 year period; complete Items a-h for sites receiving frequent application - land application of sewage sludge in excess of 70% the agronomic rate at a frequency greater than once in a 3 year period)

a. Provide a general location map for each county which clearly indicates the location of all the land application sites.

b. For each land application site provide a site plan of sufficient detail to clearly show the concerned landscape features and associated buffer zones (See instructions). Provide a legend for each landscape feature and the net acreage for each field taking into account the proposed buffer zones.

c. In order to ensure that land application of bulk sewage sludge will not impact federally listed threatened or endangered species or federally designated critical habitat, the applicant must notify the field office of the U. S. Department of the Interior, Fish and Wildlife Service (FWS), by a letter, the proposed land application activities with the identification of the land application sites. The address and phone number of FWS are provided below.

U.S. Fish and Wildlife Service
Virginia Field Office
P.O. Box 480
White Marsh, VA 23183
TEL: (804) 693-6694

Provide a copy of the notification letter with this application form.

d. Provide a soil survey map, preferably photographically based, with the field boundaries clearly marked. (A USDA-SCS soil survey map should be provided, if available.)

Provide a detailed legend for each soil survey map which uses accepted USDA-SCS descriptions of the typifying pedon for each soil series (soil type). Complex associations may be described as a range of characteristics. Soil descriptions shall include as a minimum the following information.

1) Soil symbol
2) Soil series, textural phase and slope range
3) Depth to seasonal high water table
4) Depth to bedrock
5) Estimated soil productivity group (for the proposed crop rotation)

Item e - h are required for sites receiving frequent application of sewage sludge

e. In order to verify the information provided in item d, characterize the soil at each land application site. Representative soil borings or test pits to a depth of five feet or to bedrock if shallower, are to be coordinated for the typifying pedon of each soil series (soil type). Soil descriptions shall include as a minimum the following information:

1) Soil symbol
2) Soil series, textural phase and slope range
3) Depth to seasonal high water table
4) Depth to bedrock
5) Estimated soil productivity group (for the proposed crop rotation)

f. Collect and analyze soil samples from each field, weighted to best represent each of the soil borings performed for Item e. Using the table below or a separate attachment, provide at least one analysis per sample for each of the

following parameters.

N/A

Soil Organic Matter (%)	
Soil pH (std. units)	
Cation Exchange Capacity (meq/100g)	
Total Nitrogen (ppm)	
Organic Nitrogen (ppm)	
Ammonia Nitrogen (ppm)	
Nitrate Nitrogen (ppm)	
Available Phosphorus (ppm)	
Exchangeable Potassium (mg/100g)	
Exchangeable Sodium (mg/100g)	
Exchangeable Calcium (mg/100g)	
Exchangeable Magnesium (mg/100g)	
Arsenic (ppm)	
Cadmium (ppm)	
Copper (ppm)	
Lead (ppm)	
Mercury (ppm)	
Molybdenum (ppm)	
Nickel (ppm)	
Selenium (ppm)	
Zinc (ppm)	
Manganese (ppm)	
Particle Size Analysis or USDA Textural Estimate (%)	

g. Relate the crop nutrient needs to anticipated yields, soil productivity rating and the various fertilizer or nutrient sources from sludge and chemical fertilizers. Describe any specialized agronomic management practices which may be required as a result of high soil pH. If the sludge is expected to possess an unusually high CCE or other unusual properties, provide a description of any plant tissue testing, supplemental fertilization or intensive agronomic management practices which may be necessary.

h. Using a narrative format and referencing any related charts, describe the proposed cropping system. Show how the crop rotation and management will be coordinated with the design of the land application system. Include any supplemental fertilization program, soil testing and the coordination of tillage practices, planting and harvesting schedules and timing of land application.

FACILITY NAME: RIVER STP VPDES PERMIT NUMBER: VA 0024040

SEWAGE SLUDGE APPLICATION AGREEMENT

N/A

This sewage sludge application agreement is made on this date _____ between _____, referred to here as "landowner", and _____, referred to here as the "Permittee".

Landowner is the owner of agricultural land shown on the map attached as Exhibit A and designated there as _____ ("landowner's land"). Permittee agrees to apply and landowner agrees to comply with certain permit requirements following application of sewage sludge on landowner's land in amounts and in a manner authorized by VPDES permit number _____ which is held by the Permittee.

Landowner acknowledges that the appropriate application of sewage sludge will be beneficial in providing fertilizer and soil conditioning to the property. Moreover, landowner acknowledges having been expressly advised that, in order to protect public health, the following site restrictions must be adhered to when sewage sludge receives Class B treatment for pathogen reduction:

1. Food crops with harvested parts that touch the sewage sludge/soil mixture and are totally above the land surface shall not be harvested for 14 months after application of sewage sludge;
2. Food crops with harvested parts below the surface of the land shall not be harvested for 20 months after application of sewage sludge when the sewage sludge remains on the land surface for four months or longer prior to incorporation into the soil;
3. Food crops with harvested parts below the surface of the land shall not be harvested for 38 months after application of sewage sludge when the sewage sludge remains on the land surface for less than four months prior to incorporation into the soil;
4. Food crops, feed crops, and fiber crops shall not be harvested for 30 days after application of sewage sludge;
5. Animals shall not be grazed on the land for 30 days after application of sewage sludge;
6. Turf grown on land where sewage sludge is applied shall not be harvested for one year after application of the sewage sludge when the harvested turf is placed on either land with a high potential for public exposure or a lawn, unless otherwise specified by the State Water Control Board;
7. Public access to land with a high potential for public exposure shall be restricted for one year after application of sewage sludge;
8. Public access to land with a low potential for public exposure shall be restricted for 30 days after application of sewage sludge.
9. Tobacco, because it has been shown to accumulate cadmium, should not be grown on landowner's land for three years following the application of sewage sludge borne cadmium equal to or exceeding 0.5 kilograms/hectare (0.45 pounds/acre).

Permittee agrees to notify landowner or landowner's designee of the proposed schedule for sewage sludge application and specifically prior to any particular application to landowner's land. This agreement may be terminated by either party upon written notice to the address specified below.

Landowner:	Permittee:
_____	_____
Signature	Signature
_____	_____
Mailing Address	Mailing Address

FACILITY NAME: RIVER STP VPDES PERMIT NUMBER: VA0024040

SECTION D. SURFACE DISPOSAL N/A

Complete this section only if you own or operate a surface disposal site. Provide the information for each active sewage sludge unit.

1. **Information on Active Sewage Sludge Units.**
   a. Unit name or number: _____
   b. Unit location
      i. Street or Route#: _____
      County: _____
      City or Town: _____ State: _____ Zip: _____
      ii. Latitude: _____ Longitude: _____
      Method of latitude/longitude determination
      _____ USGS map _____ Filed survey _____ Other
   c. Topographic map. Provide a topographic map (or other appropriate map if a topographic map is unavailable) that shows the site location.
   d. Total dry metric tons of sewage sludge placed on the active sewage sludge unit per 365-day period:
      _____ dry metric tons.
   e. Total dry metric tons of sewage sludge placed on the active sewage sludge unit over the life of the unit:
      _____ dry metric tons.
   f. Does the active sewage sludge unit have a liner with a minimum hydraulic conductivity of 1×10^{-7} cm/sec?
      _____ Yes _____ No If "Yes", describe the liner or attach a description.
      _____
      _____
   g. Does the active sewage sludge unit have a leachate collection system? _____ Yes _____ No
      If "Yes", describe the leachate collection system or attach a description. Also, describe the method used for leachate disposal and provide the numbers of any federal, state or local permits for leachate disposal:
      _____
      _____
      _____
   h. If you answered "No" to either f or g, answer the following:
      Is the boundary of the active sewage sludge unit less than 150 meters from the property line of the surface disposal site? _____ Yes _____ No If "Yes", provide the actual distance in meters: _____
   i. Remaining capacity of active sewage sludge unit, in dry metric tons: _____ dry metric tons
      Anticipated closure date for active sewage sludge unit, if known: _____ (MM/DD/YYYY)
      Provide with this application a copy of any closure plan developed for this active sewage sludge unit.

2. **Sewage Sludge from Other Facilities.** N/A
   Is sewage sludge sent to this active sewage sludge unit from any facilities other than yours? _____ Yes _____ No
   If "Yes", provide the following information for each such facility, attach additional sheets as necessary.
   a. Facility name: _____
   b. Facility contact: _____
      Title: _____
      Phone: (_____) _____
   c. Mailing address:
      Street or P.O. Box: _____
      City or Town: _____ State: _____ Zip: _____

d. List, on this form or an attachment, the facility's VPDES permit number as well as the numbers of all other federal, state or local permits that regulate the facility's sewage sludge management practices:

N/A

Permit Number: Type of Permit:

_____ _____

_____ _____

e. Which class of pathogen reduction is achieved before sewage sludge leaves the other facility?
_____ Class A _____ Class B _____ Neither or unknown

f. Describe, on this form or on another sheet of paper, any treatment processes used at the other facility to reduce pathogens in sewage sludge: _____

g. Which vector attraction reduction option is achieved before sewage sludge leaves the other facility?
_____ Option 1 (Minimum 38 percent reduction in volatile solids)
_____ Option 2 (Anaerobic process, with bench-scale demonstration)
_____ Option 3 (Aerobic process, with bench-scale demonstration)
_____ Option 4 (Specific oxygen uptake rate for aerobically digested sludge)
_____ Option 5 (Aerobic processes plus raised temperature)
_____ Option 6 (Raise pH to 12 and retain at 11.5)
_____ Option 7 (75 percent solids with no unstabilized solids)
_____ Option 8 (90 percent solids with unstabilized solids)
_____ None or unknown

h. Describe, on this form or another sheet of paper, any treatment processes used at the other facility to reduce vector attraction properties of sewage sludge: _____

i. Describe, on this form or another sheet of paper, any other sewage sludge treatment activities performed by the other facility that are not identified in e - h above: _____

3. Vector Attraction Reduction. N/A

a. Which vector attraction reduction option, if any, is met when sewage sludge is placed on this active sewage sludge unit?
_____ Option 9 (Injection below land surface)
_____ Option 10 (Incorporation into soil within 6 hours)
_____ Option 11 (Covering active sewage sludge unit daily)

b. Describe, on this form or another sheet of paper, any treatment processes used at the active sewage sludge unit to reduce vector attraction properties of sewage sludge: _____

4. Ground Water Monitoring. N/A

a. Is ground water monitoring currently conducted at this active sewage sludge unit or are ground water monitoring data otherwise available for this active sewage sludge unit? _____ Yes _____ No

If "Yes", provide a copy of available ground water monitoring data. Also provide a written description of the well locations, the approximate depth to ground water, and the ground water monitoring procedures used to obtain these

data.

b. Has a ground water monitoring program been prepared for this active sewage sludge unit?
_____ Yes _____ No If "Yes", submit a copy of the ground water monitoring program with this application.

c. Have you obtained a certification from a qualified ground water scientist that the aquifer below the active sewage sludge unit has not been contaminated? _____ Yes _____ No

If "Yes", submit a copy of the certification with this application.

5. **Site-Specific Limits.** N/A

Are you seeking site-specific pollutant limits for the sewage sludge placed on the active sewage sludge unit?
_____ Yes _____ No If "Yes", submit information to support the request for site-specific pollutant limits with this application.

ATTACHMENT # 1

COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

Preston Bryant
Secretary of Natural Resources

West Central Regional Office
3019 Peters Creek Road, Roanoke, Virginia 24019
Telephone (540) 562-6700, Fax (540) 562-6725
www.deq.virginia.gov

David K. Paylor
Director

Steven A. Dietrich
Regional Director

March 6, 2008

Mr. Bruce R. Jones
Montgomery County Public Service Authority
Government Center Suite 2I
755 Roanoke Street
Christiansburg, VA 24073-3185

RE: VPDES Permit Application Waiver Request for Riner WWTP; VA0024040
Received March 3, 2008

Dear Mr. Jones:

Your waiver request letter has been reviewed. Your letter requested that the analysis for TSS and BOD_5 be performed on 4-hour composite samples. The permit requires TSS and BOD_5 be performed on 4 hour composite samples. Therefore, these waiver requests are consistent with current permit requirements. These waivers are granted.

It has requested that one pollutant scan be allowed instead of 3 samples be collected for ammonia, nitrate + nitrite, oil and grease, and dissolved solids. Additionally, it has been requested that one pollutant scan be allowed from the aerobic sludge digester to test for arsenic, cadmium, chromium, copper, lead, mercury, molybdenum, nickel, selenium, and zinc. Due to the time frame to collect the samples, these waiver requests are also granted.

If you have any questions about the application, please feel free to call me at (540) 562-6793 or blfrance@deq.state.va.us.

Sincerely,

Becky L France

Becky L. France
Environmental Engineer Senior

MONTGOMERY COUNTY
PUBLIC SERVICE AUTHORITY

Government Center
Suite 2I
755 Roanoke Street
Christiansburg, VA 24073-3185

February 28, 2008

Becky France- WCRO Permit Writer
Department of Environmental Quality
West Central Regional Office
3019 Peters Creek Rd.
Roanoke, Virginia 24019

Re: Riner STP NPDES Permit No. VA0024040
Waiver request

Dear Ms. France:

We are currently working on the VPDES permit renewal application for Riner STP, and would like to request the following waivers for some of the effluent and sludge sampling required in the application.

1. In part 1.A.12, we request that we be able to use 4 hour composite samples for BOD5 and TSS instead of 24 hour composites. The current Riner discharge permit only requires 4 hour composite sampling.

2. In part B.6, we request that we only use 1 pollutant scan for Ammonia, Nitrate + Nitrite, Oil and grease, and dissolved solids.

3. In the General Information section, No. 8, we request that we be allowed to use 1 pollutant scan from the aerobic sludge digester to test for Arsenic, Cadmium, Chromium, Copper, Lead, Mercury, Molybdenum, Nickel, Selenium, and Zinc.

Sincerely,

Bruce R. Jones
Wastewater Supervisor
MCPSA

ADMINISTRATIVE OFFICES: (540)381-1997
BILLING & COLLECTIONS: (540) 382-6930
FAX NO. (540) 382-5703

ATTACHMENT # 2

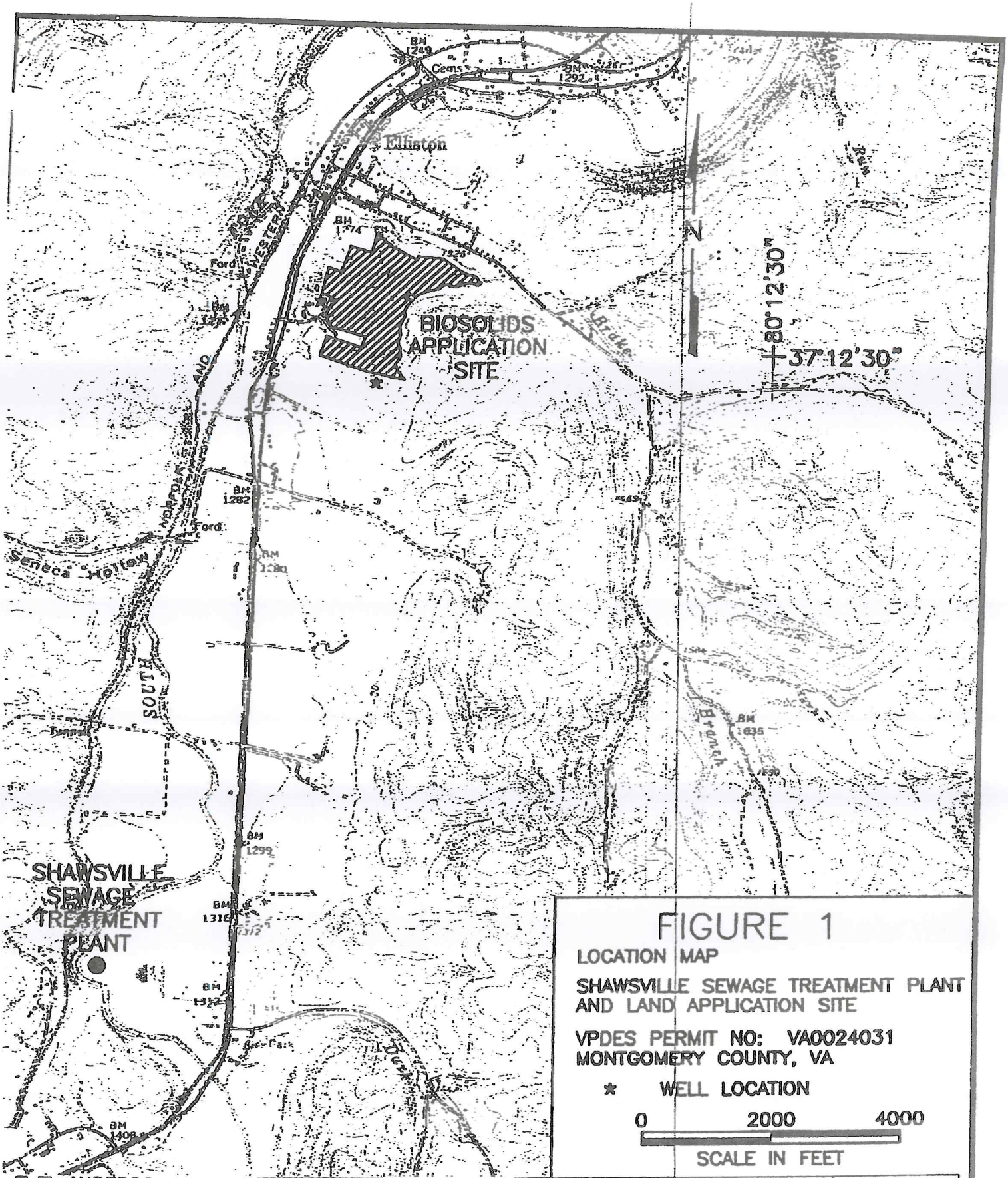


FIGURE 1

LOCATION MAP

SHAWSVILLE SEWAGE TREATMENT PLANT AND LAND APPLICATION SITE

VPDES PERMIT NO: VA0024031
MONTGOMERY COUNTY, VA

★ WELL LOCATION

0 2000 4000

SCALE IN FEET

ANDERSON AND ASSOCIATES, Inc.

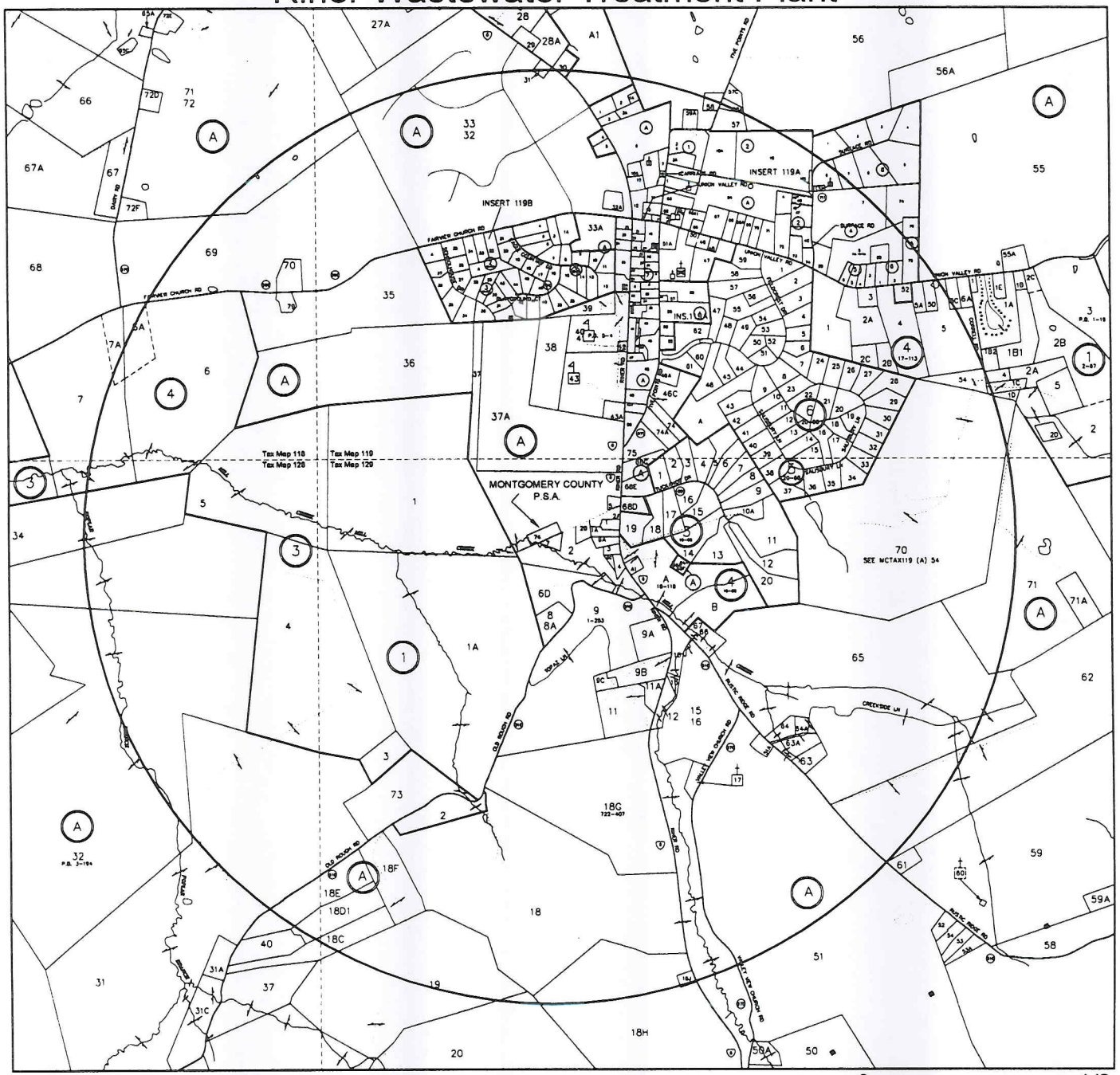
Engineers
Surveyors
Planners

Blacksburg, VA
Greensboro, NC
Middletown, VA
Richmond, VA
Tri-Cities, TN

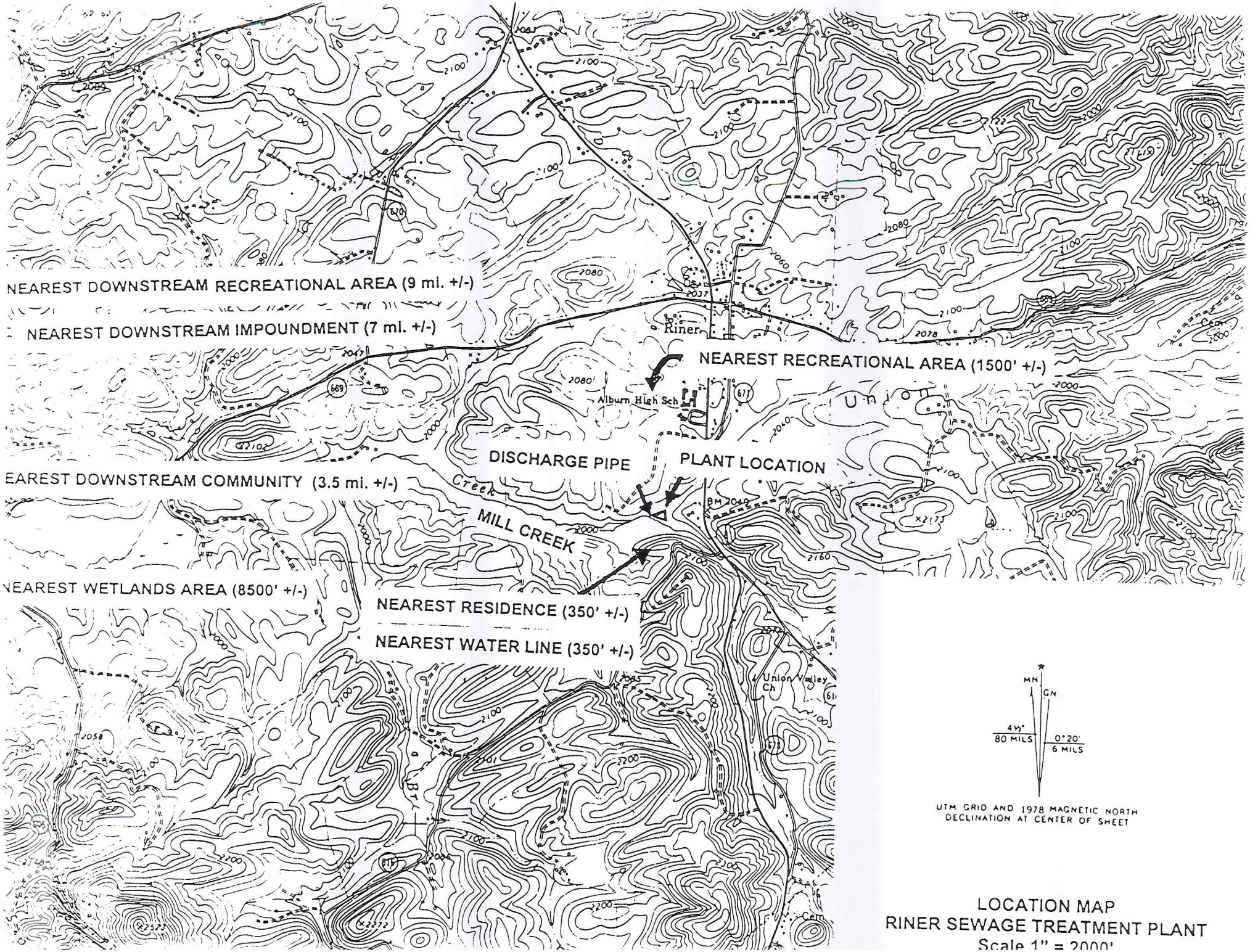
DRAWN	SCALE	DATE	DOCUMENT NO.
AJC	AS SHOWN	14 JUL 98	15409-001

IG1.DWG | 980709.1158 | AJC@AJC

Riner Wastewater Treatment Plant



Prepared by the Montgomery County Planning Department,
GIS and Mapping Services, 3/20/03.



LOCATION MAP
RINER SEWAGE TREATMENT PLANT
Scale 1" = 2000'

Montgomery County GIS

Parcel: 035261

Tax Map Number: 129- A 74

Owner: MONTGOMERY COUNTY PUBLIC SERVICE AUTHORITY

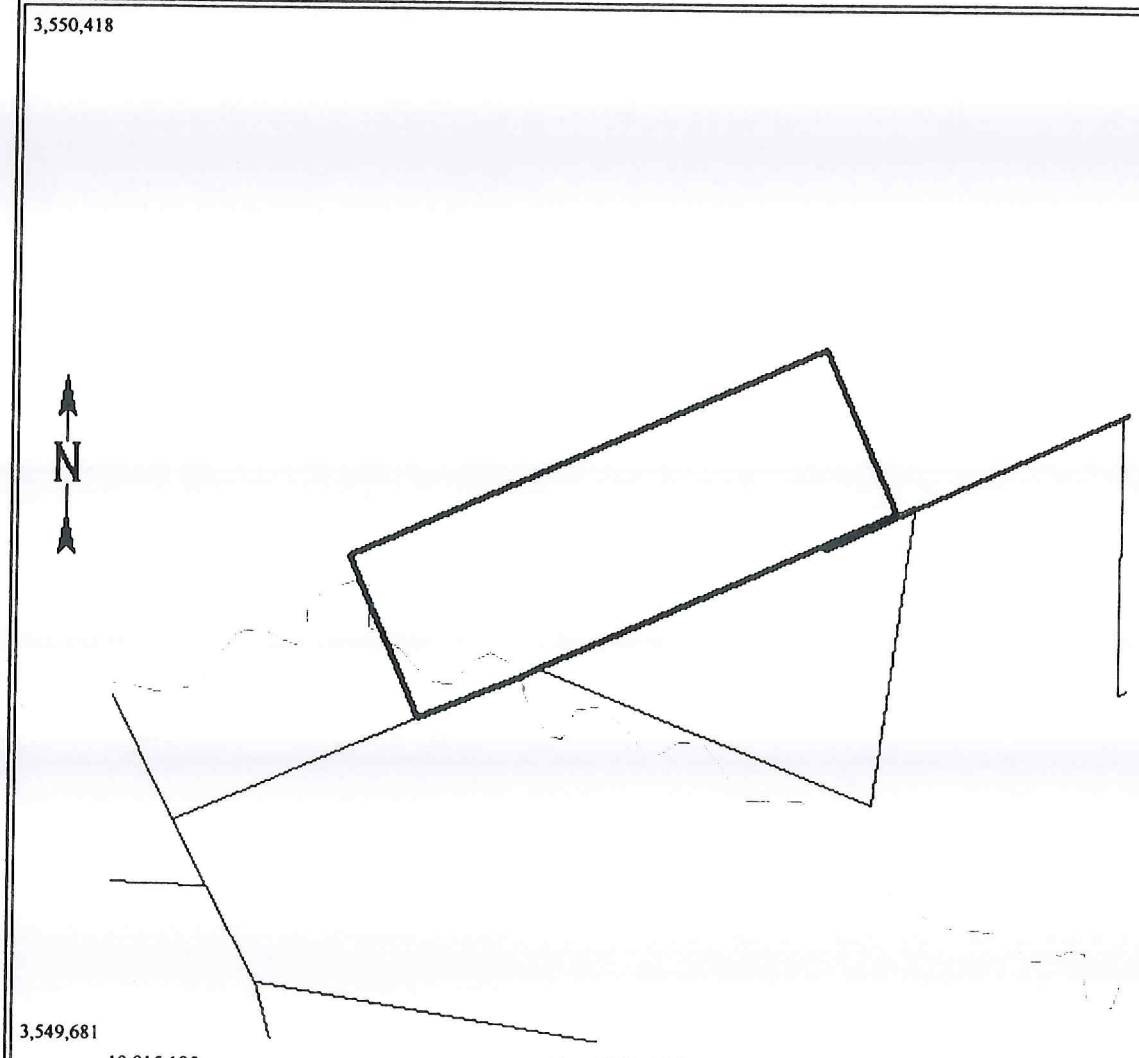
Land Value: $2,500

Building Value:

Deed Book: 1086 Pg: 0354

Acres: 1.0

Description: RINER



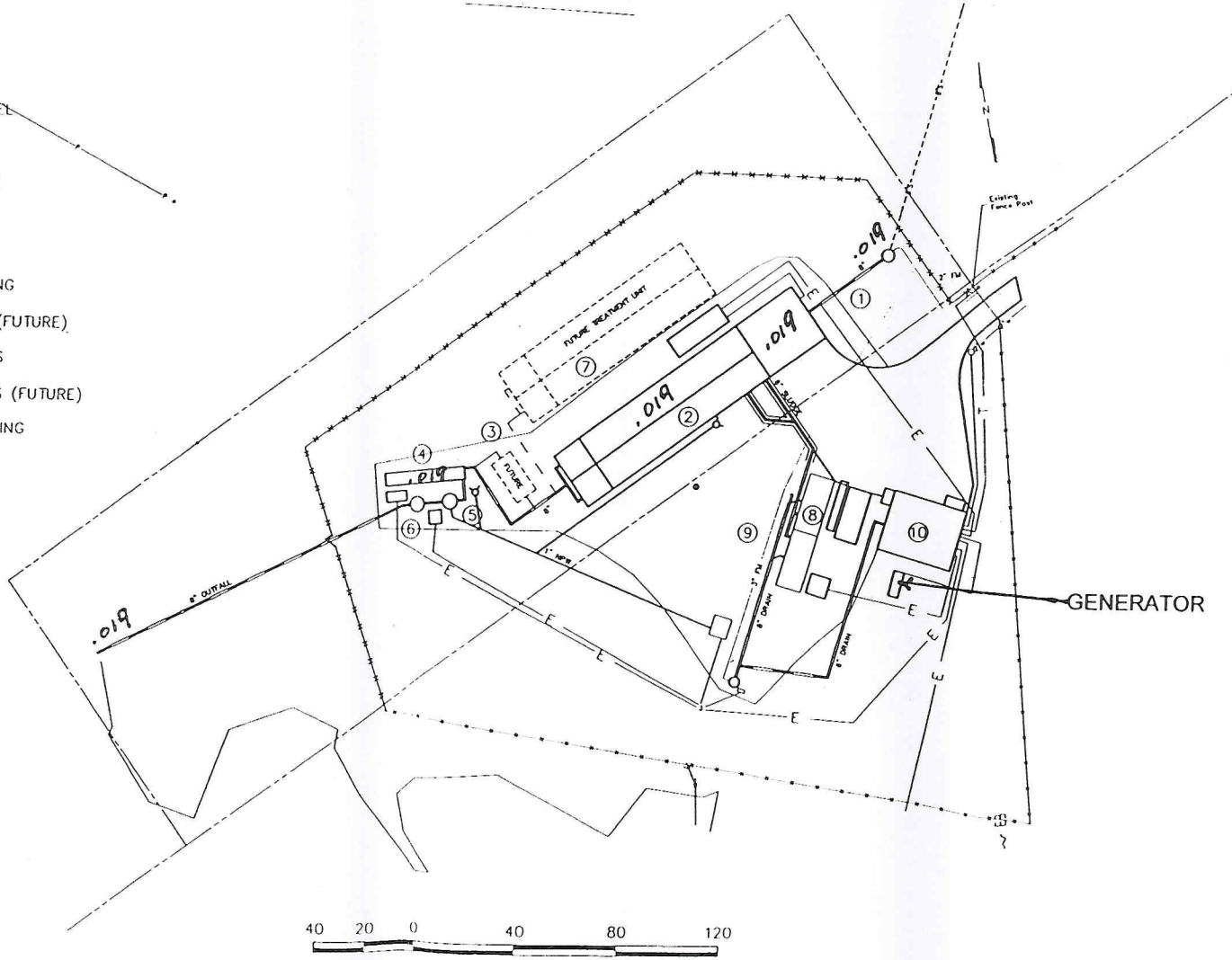
Location Map

DISCLAIMER: The information contained on this page is NOT to be construed or used as a "legal description". Map information is believed to be accurate but accuracy is not guaranteed. Any errors or omissions should be reported to the Montgomery County Mapping Office. In no event will Montgomery County be liable for any damages, including loss of data, lost profits, business interruption, loss of business information or other pecuniary loss that might arise from the use of this map or the information it contains.

Page generated on 3/21/03 9:39:58 AM

LEGEND

① INFLUENT CHANNEL
② TREATMENT UNIT
③ FILTERS (FUTURE)
④ UV DISINFECTION
⑤ POST AERATION
⑥ EFFLUENT METERING
⑦ TREATMENT UNIT (FUTURE)
⑧ SLUDGE DIGESTERS
⑨ SLUDGE DIGESTERS (FUTURE)
⑩ OPERATIONS BUILDING



40 20 0 40 80 120
SCALE IN FEET

TES, INC.
100 Ardmore St
Blacksburg, Va 24060

DATE	31 JUL 00
DESIGNED	MGG
DRAWN	MGG
CHECKED	MGG

REVISIONS

MONTGOMERY COUNTY PSA
WASTEWATER PLANT EXPANSION
RINER VIRGINIA

PLANT LAYOUT
FIGURE 2

DOCUMENT NO
13254—036
SHEET
1 1

GROSSM , May 18 2001 11:33am / 13254 DM_FIG2.DWG Layout1

ATTACHMENT # 3

Certificate of Analysis

PCA Order No. 418047

Final Report

Prepared for:

Mr. Bruce Jones
Montgomery County Public Service Authority
755 Roanoke Street
Suite 2!
Christiansburg, VA 24073

Report Date: March 17, 2008

Date Received: March 04, 2008

Project: Riner STP

Comments:

Analytical data are presented on the following pages of this report. If you have any questions or need further assistance, please feel free to contact your project manager at (540) 268-9884.

Respectfully Submitted by:

Reviewed and Approved by:

Cheryl M. Daniel
QA/QC Manager

Unless otherwise indicated, all analyses were conducted according to Standard Methods for the Examination of Water and Wastewater, 18th Edition, Test Methods for Evaluation Solid Waste (Physical/Chemical), 3rd Edition, and Methods for the Chemical Analysis of Water and Wastes, EPA.

This report sets forth the results of our analysis of samples delivered to our laboratory and shall not be construed to be a representation by ProChem Analytical Incorporated as to the source or method of procuring such samples. All reports are submitted as the confidential property of clients and authorization for publication of any statements contained in our reports is reserved pending our written consent.

PROCHEM Analytical Incorporated

Final Report

Report Date: 3/17/2008

PCA Order No.: 418047
Client: Montgomery County Public Service Authority
Project: Riner STP

Sample Number: 418047-01
Date Collected: 3/4/2008
Time Collected: 10:40

Description: Outfall 001
Matrix: Wastewater
Sample Type: Grab

Analysis	Result	Reporting Limit	Units	Date Analyzed	Time Analyzed	Analyst	Method
Ammonia as N	0.11	0.10	mg/L	3/7/2008	10:00	GLH	SM 4500NH3,F
Nitrate + Nitrite as N	41.0	1.00	mg/L	3/12/2008	16:23	SXK	SM 4500NO3,H
Oil and Grease	< 5.0	5.0	mg/L	3/5/2008	08:30	KBJ	EPA 1664A
Total Dissolved Solids	527	4	mg/L	3/10/2008	15:30	JNH	SM 2540C
Total Phosphorus as P	1.75	0.250	mg/L	3/12/2008	12:00	KNB	SM 4500P,E

ProChem Analytical Incorporated
6040 North Fork Road
Elliston, VA 24087
Phone (540) 268-9884
FAX (540) 268-2755

Analytical Request and Chain of Custody Form

PCA Order ID # 418047

Page ____ of ____
Is Order Complete? ☐ Yes ☐ No

Please Print. See Chain of Custody instructions for additional help with corresponding numbers.

1. Mail Report to:	
Company Name:	Montgomery County PSA
Attention:	(Mr.)/ Ms. Bruce R. Jones
Address:	755 Roanoke St Suite 2-E
City, State, Zip:	Christiansburg VA 24073
Telephone:	540-382-5143 FAX: same
Email:	jonesbe@nrelos.net

2. Bill to:			
Company Name:			
Attention:	Mr. / Ms. same		
Address:			
City, State, Zip:			
Telephone:			
Purchase Order No.:		Quotation No.:	

3. Turn Around Time Request
☐ Standard Business Day
☐ 3-4 Business Day Rush
☐ 2 Business Day Rush

Note: All rush turn around times are subject to ProChem Analytical approval and additional fees.

LAB USE ONLY: PCA Sample ID Number	LAB USE ONLY: pH at Receipt in Lab (S.U.)	4. Project Name / 5. Sample Location or ID	6. Sample Type (Check One): Composite	Composite of Grabs	Grab	7. Collection Dates/Times: Composite Begin Date / Time	Composite End Date / Time	Grab Date(s) / Time(s)	8. Matrix (See Key Below)	9. Container Type (Plastic/Glass/Other)	10. # of Containers	11. Preservative (See Key Below)	12. Requested Analyses
418047		River STP											
01 NH3 H2SO4		001 OUTFALL			✓			3-4-08 10:20Am	WW	PLASTIC	1	H_2SO_4	Ammonia
		001 OUTFALL			✓			3-4-08 10:25Am	WW	PLASTIC	1	H_2SO_4	nitrate / nitrite
OG		001 OUTFALL			✓			3-4-08 10:30Am	WW	GLASS	1	H_2SO_4	Oil And Grease
TP		001 OUTFALL			✓			3-4-08 10:35Am	WW	PLASTIC	1	H_2SO_4	Phosphorus
TDS		001 OUTFALL			✓			3-4-08 10:40Am	WW	Plastic	1	none	TOTAL Dissolved solids
02+ <2*		Digester-south			✓			3-4-08 10:45Am	WW	PLASTIC	1	HNO_3	metals - Arsenic, Cadmium, Chromium, Copp
													Lead, Mercury, Molybd
													Nickel, Selenium, Zinc

*pH of O & G checked at time of analysis

Matrix Key:
DW = Drinking Water; GW = Groundwater; LE = Leachate; LI = Liquid; OL = Oil; OT = Other; SL = Sludge; SO = Soil; ST = Storm Water; SU = Surface Water; SD = Solid; WW = Wastewater

Preservative Key:
None = No Preservative; H_2SO_4 = Sulfuric Acid; HNO_3 = Nitric Acid; HCl = Hydrochloric Acid; NaOH = Sodium Hydroxide; $(CH_3CO_2)_2ZN$ = Zinc Acetate; $C_{10}H_{14}O_8N_2Na_2$ = EDTA; $Na_2S_2O_3$ = Sodium Thiosulfate

13. QA/QC Package Request (please circle one): I II III IV V (Custom)

14. Request for Additional Reporting (please check all that apply):
☐ via Fax (extra fee after 1st fax) ☑ via Email (no extra fee) ☐ via CD-ROM (extra fee)

15. Comments: * 1.5 mLs of HNO_3 added to sample to achieve a pH of <2 S.U.

16. Sampler(s) (Printed Name and Signature): Greg Criner Greg Criner

17. Relinquished by (Signature):	Date/Time	18. Received by (Signature):	Date/Time
Greg Criner	3-4-08 12:03Pm	Amanda Cole	3-4-08 1203
17. Relinquished by (Signature):	Date/Time	18. Received by (Signature):	Date/Time
17. Relinquished by (Signature):	Date/Time	18. Received by (Signature):	Date/Time

Lab Use Only:
Temperature upon receipt in lab = ____ °C
Samples Transported on ice? ☑ Yes ☐ No ☐ N/A
PCA Project Manager: ____
Method of Shipment: ☐ PCA Personnel ☑ Client Personnel ☐ UPS ☐ FedEx ☐ Airborne ☐ USPS Other ____

MONTGOMERY COUNTY
PUBLIC SERVICE AUTHORITY

Government Center
Suite 2I
755 Roanoke Street
Christiansburg, VA 24073-3185

March 13, 2008

Ms. Becky L. France, Environmental Engineer Senior
Department of Environmental Quality
West Central Regional Office
3019 Peters Creek Road
Roanoke, VA 24019

Dear Ms. France:

Please find attached the data to fulfill the Water Quality Standards Monitoring requirements for Part 1.C.7 Attachment A, for the Riner STP NPDES Permit No. VA0024040.

If you have any questions please call me at (540)268-5143.

Sincerely,

Bruce R. Jones
Wastewater Supervisor

BRJ/ljp

Attachment

ADMINISTRATIVE OFFICES: (540)381-1997
BILLING & COLLECTIONS: (540) 382-6930
FAX NO. (540) 382-5703

REI Consultants Inc.

Date: *06-Oct-06*

CLIENT: MONTGOMERY COUNTY PSA
Client Sample ID: 001 OUTFALL GRAB
Project:
Site ID: RINER PLANT

WorkOrder: 0609E54
Lab ID: 0609E54-01A
Collection Date: 9/26/2006 11:05:00 AM
Matrix: WASTE WATER

Analyses	Result	Units	Qual	MDL	PQL	MCL	Prep Date	Date Analyzed
TOTAL METALS BY ICP			E200.7				Analyst: MD	
Zinc	0.173	mg/L		0.003	0.050	NA	09/28/06 12:00 AM	09/28/06 7:48 PM

Key:
- MCL: Maximum Contaminant Level
- MDL: Minimum Detection Limit
- NA: Not Applicable
- ND: Not Detected at the PQL or MDL
- PQL: Practical Quantitation Limit
- TIC: Tentatively Identified Compound

Qualifiers:
- B: Analyte detected in the associated Method Blank
- E: Value estimated due to calibration range exceedance
- H: Sample extraction/analysis holding time exceeded
- S: Spike/Surrogate Recovery exceeds accepted recovery limits
- X: Value exceeds Maximum Contaminant Level or Regulatory Level

REI Consultants Inc.

Date: *06-Oct-06*

CLIENT:	MONTGOMERY COUNTY PSA	**WorkOrder:**	0609E54
Client Sample ID:	001 OUTFALL COMP	**Lab ID:**	0609E54-02A
Project:		**Collection Date:**	9/26/2006 11:00:00 AM
Site ID:	RINER PLANT	**Matrix:**	WASTE WATER

Analyses	Result	Units	Qual	MDL	PQL	MCL	Prep Date	Date Analyzed
HARDNESS			SM2340 B				Analyst: MD	
Hardness, Total (As CaCO3)	232	mg/L		NA	1.00	NA	09/28/06 12:00 AM	09/28/06 7:54 PM

Key:
- MCL Maximum Contaminant Level
- MDL Minimum Detection Limit
- NA Not Applicable
- ND Not Detected at the PQL or MDL
- PQL Practical Quantitation Limit
- TIC Tentatively Identified Compound

Qualifiers:
- B Analyte detected in the associated Method Blank
- E Value estimated due to calibration range exceedance
- H Sample extraction/analysis holding time exceeded
- S Spike/Surrogate Recovery exceeds accepted recovery limits
- X Value exceeds Maximum Contaminant Level or Regulatory Level

EI Consultants Inc.

Date: *14-Dec-06*

LIENT:	MONTGOMERY COUNTY PSA	**WorkOrder:**	0612353
lient Sample ID:	OUTFALL 001 COMP	**Lab ID:**	0612353-01A
roject:	RINER STP	**Collection Date:**	12/5/2006 11:00:00 AM
te ID:		**Matrix:**	WASTE WATER

nalyses	Result	Units	Qual	MDL	PQL	MCL	Prep Date	Date Analyzed
ARDNESS			SM2340 B				Analyst: DL	
Hardness, Total (As CaCO3)	190	mg/L		NA	1.00	NA	12/08/06 12:00 AM	12/12/06 2:17 AM
OTAL KJELDAHL NITROGEN (TKN)			E351.3				Analyst: JLM	
Nitrogen, Kjeldahl, Total	1.20	mg/L		NA	1.00	NA		12/11/06 8:00 AM

ey:

MCL	Maximum Contaminant Level
MDL	Minimum Detection Limit
NA	Not Applicable
ND	Not Detected at the PQL or MDL
PQL	Practical Quantitation Limit
TIC	Tentatively Identified Compound

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value estimated due to calibration range exceedence
H	Sample extraction/analysis holding time exceeded
S	Spike/Surrogate Recovery exceeds accepted recovery limits
X	Value exceeds Maximum Contaminant Level or Regulatory Level

:EI Consultants Inc.

Date: *14-Dec-06*

LIENT:	MONTGOMERY COUNTY PSA	**WorkOrder:**	0612353
lient Sample ID:	OUTFALL 001 GRAB	**Lab ID:**	0612353-02A
:oject:	RINER STP	**Collection Date:**	12/5/2006
te ID:		**Matrix:**	LIQUID

nalyses	**Result**	**Units**	**Qual**	**MDL**	**PQL**	**MCL**	**Prep Date**	**Date Analyzed**
)TAL METALS BY ICP			**E200.7**				**Analyst: DL**	
Zinc	0.113	mg/L		0.003	0.050	NA	12/08/06 12:00 AM	12/12/06 2:32 AM

Key:

MCL	Maximum Contaminant Level
MDL	Minimum Detection Limit
NA	Not Applicable
ND	Not Detected at the PQL or MDL
PQL	Practical Quantitation Limit
TIC	Tentatively Identified Compound

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value estimated due to calibration range exceedence
H	Sample extraction/analysis holding time exceeded
S	Spike/Surrogate Recovery exceeds accepted recovery limits
X	Value exceeds Maximum Contaminant Level or Regulatory Level

REI Consultants Inc.

Date: 15-Mar-07

CLIENT:	MONTGOMERY COUNTY PSA	**WorkOrder:**	0703484
Client Sample ID:	001 OUTFALL COMP	**Lab ID:**	0703484-01A
Project:	RINER STP	**Collection Date:**	3/6/2007 11:00:00 AM
Site ID:		**Matrix:**	WASTE WATER

Analyses	Result	Units	Qual	MDL	PQL	MCL	Prep Date	Date Analyzed
HARDNESS			SM2340 B				Analyst: BP	
Hardness, Total (As CaCO3)	188	mg/L		NA	1.00	NA	03/09/07 12:00 AM	03/13/07 5:54 PM

Key:
- MCL Maximum Contaminant Level
- MDL Minimum Detection Limit
- NA Not Applicable
- ND Not Detected at the PQL or MDL
- PQL Practical Quantitation Limit
- TIC Tentatively Identified Compound, Estimated Concentration

Qualifiers:
- B Analyte detected in the associated Method Blank
- E Value estimated due to calibration range exceedance
- H Sample extraction/analysis holding time exceeded
- J Analyte detected at less than the PQL
- S Spike/Surrogate Recovery exceeds accepted recovery limits
- X Value exceeds Maximum Contaminant Level or Regulatory Level

REI Consultants Inc.

Date: *15-Mar-07*

CLIENT:	MONTGOMERY COUNTY PSA	**WorkOrder:**	0703484
Client Sample ID:	001 OUTFALL GRAB	**Lab ID:**	0703484-02A
Project:	RINER STP	**Collection Date:**	3/6/2007 11:10:00 AM
Site ID:		**Matrix:**	WASTE WATER

Analyses	Result	Units	Qual	MDL	PQL	MCL	Prep Date	Date Analyzed
TOTAL METALS BY ICP			E200.7				Analyst: BP	
Zinc	0.103	mg/L		0.0030	0.050	NA	03/09/07 12:00 AM	03/13/07 6:09 PM

Key:
- MCL Maximum Contaminant Level
- MDL Minimum Detection Limit
- NA Not Applicable
- ND Not Detected at the PQL or MDL
- PQL Practical Quantitation Limit
- TIC Tentatively Identified Compound, Estimated Concentration

Qualifiers:
- B Analyte detected in the associated Method Blank
- E Value estimated due to calibration range exceedance
- H Sample extraction/analysis holding time exceeded
- J Analyte detected at less than the PQL
- S Spike/Surrogate Recovery exceeds accepted recovery limit
- X Value exceeds Maximum Contaminant Level or Regulatory Level

REI Consultants Inc.

Date: *14-Jun-07*

CLIENT: MONTGOMERY COUNTY PSA
Client Sample ID: 001 OUTFALL
Project: RINER STP
Site ID:

WorkOrder: 0706315
Lab ID: 0706315-01A
Collection Date: 6/5/2007 11:00:00 AM
Matrix: WASTE WATER

Analyses	Result	Units	Qual	MDL	PQL	MCL	Prep Date	Date Analyzed
TOTAL METALS BY ICP			E200.7				Analyst: JD	
Zinc	0.141	mg/L		NA	0.050	NA	06/07/07 12:00 AM	06/07/07 8:00 PM
HARDNESS			SM2340 B				Analyst: JD	
Hardness, Total (As CaCO3)	204	mg/L		NA	1.00	NA	06/07/07 12:00 AM	06/07/07 8:00 PM
TOTAL KJELDAHL NITROGEN (TKN)			SM4500-NORGC				Analyst: SB	
Nitrogen, Kjeldahl, Total	ND	mg/L		NA	1.00	NA		06/12/07 2:37 PM

Key:
- MCL: Maximum Contaminant Level
- MDL: Minimum Detection Limit
- NA: Not Applicable
- ND: Not Detected at the PQL or MDL
- PQL: Practical Quantitation Limit
- TIC: Tentatively Identified Compound, Estimated Concentration

Qualifiers:
- B: Analyte detected in the associated Method Blank
- E: Value estimated due to calibration range exceedence
- H: Sample extraction/analysis holding time exceeded
- J: Analyte detected at less than the PQL
- S: Spike/Surrogate Recovery exceeds accepted recovery limits
- X: Value exceeds Maximum Contaminant Level or Regulatory Level

REI Consultants, Inc.

Date: *19-Sep-07*

CLIENT: MONTGOMERY COUNTY PSA
Client Sample ID: 001 OUTFALL COMP
Project: RINER STP
Site ID:

WorkOrder: 0709693
Lab ID: 0709693-01A
Collection Date: 9/11/2007 11:00:00 AM
Matrix: WASTE WATER

Analyses	Result	Units	Qual	PQL	MCL	Prep Date	Date Analyzed
HARDNESS			SM2340 B			Analyst: BP	
Hardness, Total (As CaCO3)	201	mg/L		1.00	NA	09/14/07 9:09 AM	09/17/07 8:02 PM
TOTAL KJELDAHL NITROGEN (TKN)			SM4500-NORGC			Analyst: DB	
Nitrogen, Kjeldahl, Total	1.9	mg/L		1.0	NA		09/13/07 9.00 AM

Key:
- MCL Maximum Contaminant Level
- MDL Minimum Detection Limit
- NA Not Applicable
- ND Not Detected at the PQL or MDL
- PQL Practical Quantitation Limit
- TIC Tentatively Identified Compound, Estimated Concentrati

Qualifiers:
- B Analyte detected in the associated Method Blank
- E Estimated Value above quantitation range
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate Recovery outside accepted recovery limi
- * Value exceeds Maximum Contaminant Level

REI Consultants, Inc.

Date: *19-Sep-07*

CLIENT: MONTGOMERY COUNTY PSA
Client Sample ID: 001 OUTFALL GRAB
Project: RINER STP
Site ID:

WorkOrder: 0709693
Lab ID: 0709693-02A
Collection Date: 9/11/2007 11:00:00 AM
Matrix: WASTE WATER

Analyses	Result	Units	Qual	PQL	MCL	Prep Date	Date Analyzed
TOTAL METALS BY ICP			E200.7			Analyst: BP	
Zinc	0.075	mg/L		0.050	NA	09/14/07 9:09 AM	09/17/07 8:20 PM

ey: MCL Maximum Contaminant Level
MDL Minimum Detection Limit
NA Not Applicable
ND Not Detected at the PQL or MDL
PQL Practical Quantitation Limit
TIC Tentatively Identified Compound, Estimated Concentrati

Qualifiers:
B Analyte detected in the associated Method Blank
E Estimated Value above quantitation range
H Holding times for preparation or analysis exceeded
S Spike/Surrogate Recovery outside accepted recovery limi
* Value exceeds Maximum Contaminant Level

REI Consultants, Inc.

Date: 27-Dec-07

CLIENT: MONTGOMERY COUNTY PSA
Client Sample ID: 001 OUTFALL COMP
Project: RINER STP
Site ID: RINER STP

WorkOrder: 0712774
Lab ID: 0712774-01A
Collection Date: 12/11/2007 [illegible] AM
Matrix: WASTE WATER

12-11-07 comp

Analyses	Result	Units	Qual	PQL	MCL	Prep Date	Date Analyzed
HARDNESS			**SM2340 B**			Analyst: BP	
Hardness, Total (As CaCO3)	262	mg/L		1.00	NA	12/13/07 9:48 AM	[illegible] PM
TOTAL KJELDAHL NITROGEN (TKN)			**SM4500-NORGC**			Analyst: JJ	
Nitrogen, Kjeldahl, Total	ND	mg/L		1.0	NA		12/13/07 [illegible] AM

Key: MCL Maximum Contaminant Level
MDL Minimum Detection Limit
NA Not Applicable
ND Not Detected at the PQL or MDL
PQL Practical Quantitation Limit
TIC Tentatively Identified Compound, Estimated Concentration

Qualifiers: B Analyte detected in the associated Method Blank
J Estimated Value above quantitation range
H Holding times for preparation or analysis exceeded
S Spike/Surrogate Recovery outside accepted recovery limits
* Value exceeds Maximum Contaminant Level

REI Consultants, Inc.

Date: 21-Dec-07

CLIENT: MONTGOMERY COUNTY P$A
Client Sample ID: 001 OUTFALL GRAB
Project: RINER STP
Site ID: RINER STP

WorkOrder: 0712774
Lab ID: 0712774-02A
Collection Date: 12/11/2007 11:00:00 AM 12-11-07
Matrix: WASTE WATER Grab

Analyses	Result	Units	Qual	PQL	MCL	Prep Date	Date Analyzed
TOTAL METALS BY ICP			E200.7			Analyst: BP	
Zinc	0.109	mg/L		0.050	NA	12/13/07 9:48 AM	12/18/07 [illegible]

Key: MCL Maximum Contaminant Level
MDL Minimum Detection Limit
NA Not Applicable
ND Not Detected at the PQL or MDL
PQL Practical Quantitation Limit
TIC Tentatively Identified Compound, Estimated Concentration

Qualifiers: B Analyte detected in the associated Method Blank
J Estimated Value above quantitation range
H Holding times for preparation or analysis exceeded
S Spike/Surrogate Recovery outside accepted recovery limit
* Value exceeds Maximum Contaminant Level

REI Consultants, Inc. Analytical Results

Date: *12-Mar-08*

CLIENT:	MONTGOMERY COUNTY PSA	**WorkOrder:**	0803294
Client Sample ID:	001 OUTFALL GRAB	**Lab ID:**	0803294-02A
Project:	RINER STP	**Collection Date:**	3/4/2008 11:05:00 AM
Site ID:	RINER STP	**Matrix:**	WASTE WATER

Analyses	Result	Units	Qual	PQL	MCL	Prep Date	Date Analyzed
METALS BY ICP			E200.7			Analyst: BP	
Zinc	0.101	mg/L		0.050	NA	03/06/08 11:52 AM	03/11/08 12:40 PM

Key:
- MCL Maximum Contaminant Level
- MDL Minimum Detection Limit
- NA Not Applicable
- ND Not Detected at the PQL or MDL
- PQL Practical Quantitation Limit
- TIC Tentatively Identified Compound, Estimated Concentration

Qualifiers:
- B Analyte detected in the associated Method Blank
- E Estimated Value above quantitation range
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate Recovery outside accepted recovery limits
- * Value exceeds Maximum Contaminant Level

REI Consultants, Inc. Analytical Results Date: *12-Mar-08*

CLIENT: MONTGOMERY COUNTY PSA
Client Sample ID: 001 OUTFALL
Project: RINER STP
Site ID: RINER STP

WorkOrder: 0803294
Lab ID: 0803294-01A
Collection Date: 3/4/2008 11:00:00 AM
Matrix: WASTE WATER

Analyses	Result	Units	Qual	PQL	MCL	Prep Date	Date Analyzed
HARDNESS			SM2340 B			Analyst: BP	
Hardness, Total (As CaCO3)	197	mg/L		1.00	NA	03/06/08 12:00 AM	03/11/08 12:34 PM
TOTAL KJELDAHL NITROGEN (TKN)			SM4500-NORGC			Analyst: JL	
Nitrogen, Kjeldahl, Total	2.7	mg/L		1.0	NA		03/07/08 7:30 AM

Key: MCL Maximum Contaminant Level
MDL Minimum Detection Limit
NA Not Applicable
ND Not Detected at the PQL or MDL
PQL Practical Quantitation Limit
TIC Tentatively Identified Compound, Estimated Concentration

Qualifiers: B Analyte detected in the associated Method Blank
E Estimated Value above quantitation range
H Holding times for preparation or analysis exceeded
S Spike/Surrogate Recovery outside accepted recovery limits
* Value exceeds Maximum Contaminant Level

DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER QUALITY MONITORING
ATTACHMENT A

FACILITY NAME: Riner STP
ADDRESS: 755 Roanoke Street, Suite D, Christiansburg, VA 24073

PERMIT NO.: VA0024040 OUTFALL NO.: 001

DEQ PARAM #	EPA PARAM #	CHEMICAL	EPA ANALYSIS NO.	QUANTIFICATION LEVEL[1]	REPORTING RESULTS	SAMPLE TYPE[2]	SAMPLE FREQUENCY[3]	SPECIFIC TARGET VALUE[4]
METALS								
		Antimony (Dis.)	(5)	(5)		G	X	
		Arsenic III (Dis.)	(5)	(5)		G	X	
440	01025	Cadmium (Dis.)	(5)	(5)		G	X	
232	01033	Chromium III*	(5)	(5)		G	X	
023	01032	Chromium VI	(5)	(5)		G	X	
442	01040	Copper (Dis.)	(5)	(5)		G	X	
405	01049	Lead (Dis.)	(5)	(5)		G	X	
444	71890	Mercury (Dis.)	(5)	(5)		G	X	
445	01065	Nickel (Dis.)	(5)	(5)		G	X	
446	01145	Selenium (Dis.)	(5)	(5)		G	X	
447	01075	Silver (Dis.)	(5)	(5)		G	X	
448	01092	Zinc (Dis.)	(5)	(5)		G	1/3 Months	50
PESTICIDES/PCB'S								
332	39330	Aldrin	608	0.05		G or C	X	NA
333	39350	Chlordane	608	0.2		G or C	X	NA
334	77969	Chlorpyrifos (Dursban)	622	(7)		G or C	X	NA
		DDD	608	0.1		G or C	X	NA
		DDE	608	0.1		G or C	X	NA
335	39370	DDT	608	0.1		G or C	X	NA
336	39560	Demeton	(6)	(7)		G or C	X	NA
337	39380	Dieldrin	608	0.1		G or C	X	NA
		Endosulfan	608	0.1		G or C	X	NA
339	39390	Endrin	608	0.1		G or C	X	NA
340	39580	Guthion	622	(7)		G or C	X	NA
341	39410	Heptachlor	608	0.05		G or C	X	NA
342	77835	Hexachlorocyclo hexane (Lindane)	608	0.05		G or C	X	NA
		Kepone	(6)	(7)		G or C	X	NA

DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER QUALITY MONITORING
ATTACHMENT A

FACILITY NAME: Riner STP
ADDRESS: 755 Roanoke Street, Suite D, Christiansburg, VA 24073

PERMIT NO.: VA0024040 OUTFALL NO.: 001

DEQ PARAM #	EPA PARAM #	CHEMICAL	EPA ANALYSIS NO.	QUANTIFICATION LEVEL[1]	REPORTING RESULTS	SAMPLE TYPE[2]	SAMPLE FREQUENCY[3]	SPECIFIC TARGET VALUE[4]
343	39530	Malathion	(6)	(7)		G or C	X	NA
344	39480	Methoxychlor	(6)	(7)		G or C	X	NA
345	39755	Mirex	(6)	(7)		G or C	X	NA
346	39540	Parathion	(6)	(7)		G or C	X	NA
641		PCB-1242	608	1.0		G or C	X	NA
642		PCB-1254	608	1.0		G or C	X	NA
643		PCB-1221	608	1.0		G or C	X	NA
644		PCB-1232	608	1.0		G or C	X	NA
645		PCB-1248	608	1.0		G or C	X	NA
618	39508	PCB-1260	608	1.0		G or C	X	NA
646		PCB-1016	608	1.0		G or C	X	NA
349	39400	Toxaphene	608	5.0		G or C	X	NA
BASE NEUTRAL EXTRACTABLES								
		Acenaphthene	625	10.0		G or C	X	NA
275	34222	Anthracene	625	10.0		G or C	X	NA
276	34526	Benzo(a) anthracene	625	10.0		G or C	X	NA
648		Benzo(b) fluoranthene	625	10.0		G or C	X	NA
278	34242	Benzo(k) fluoranthene	625	10.0		G or C	X	NA
277	34247	Benzo(a)pyrene	625	10.0		G or C	X	NA
		Butyl benzyl phthalate	625	10.0		G or C	X	NA
282	34320	Chrysene	625	10.0		G or C	X	NA
654		Dibenz(a,h) anthracene	625	20.0		G or C	X	NA
		Dibutyl phthalate	625	10.0		G or C	X	NA
259	34536	1,2-Dichlorobenzene	625	10.0		G or C	X	NA
264	34566	1,3-Dichlorobenzene	625	10.0		G or C	X	NA
266	34571	1,4-Dichlorobenzene	625	10.0		G or C	X	NA
		Diethyl phthalate	625	10.0		G or C	X	NA
170		Di-2-Ethylhexyl Phthalate	625	10.0		G or C	X	NA
239	34611	2,4-Dinitrotoluene	625	10.0		G or C	X	NA
287	34376	Fluoranthene	625	10.0		G or C	X	NA

DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER QUALITY MONITORING
ATTACHMENT A

FACILITY NAME: Riner STP
ADDRESS: 755 Roanoke Street, Suite D, Christiansburg, VA 24073

PERMIT NO.: VA0024040 OUTFALL NO.: 001

DEQ PARAM #	EPA PARAM #	CHEMICAL	EPA ANALYSIS NO.	QUANTIFICATION LEVEL[1]	REPORTING RESULTS	SAMPLE TYPE[2]	SAMPLE FREQUENCY[3]	SPECIFIC TARGET VALUE[4]
288	34381	Fluorene	625	10.0		G or C	X	NA
651		Indeno(1,2,3-cd) pyrene	625	20.0		G or C	X	NA
650		Isophorone	625	10.0		G or C	X	NA
293	34696	Naphthalene	625	10.0		G or C	X	NA
		Nitrobenzene	625	10.0		G or C	X	NA
296	34469	Pyrene	625	10.0		G or C	X	NA
		1,2,4 Trichlorobenzene	625	10.0		G or C	X	NA
VOLATILES								
216	34030	Benzene	624	10.0		G	X	NA
484	32104	Bromoform	624	10.0		G	X	NA
236	32102	Carbon Tetrachloride	624	10.0		G	X	NA
652		Chlorodibromo methane	624	10.0		G	X	NA
223	32106	Chloroform	624	10.0		G	X	NA
649		Dichloromethane	624	20.0		G	X	NA
244	79603	Dichlorobromo methane	624	20.0		G	X	NA
260	34531	1,2-Dichloroethane	624	10.0		G	X	NA
		1,1-Dichloroethylene	624	10.0		G	X	NA
172	34371	Ethylbenzene	624	10.0		G	X	NA
653		Monochlorobenzene	624	50.0		G	X	NA
220	34475	Tetrachloro ethylene	624	10.0		G	X	NA
222	34010	Toluene	624	10.0		G	X	NA
155	39180	Trichloroethylene	624	10.0		G	X	NA
173	39175	Vinyl Chloride	624	10.0		G	X	NA
ACIDS EXTRACTABLES								
		2-Chlorophenol	625	10.0		G or C	X	NA
		2,4 Dichlorophenol	625	10.0		G or C	X	NA
		2,4 Dimethylphenol	625	10.0		G or C	X	NA
210	39032	Pentachlorophenol	625	50.0		G or C	X	NA
175	46000	Phenol[8]	625	10.0		G or C	X	NA
602	34621	2,4,6-Trichlorophenol	625	10.0		G or C	X	NA

DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER QUALITY MONITORING
ATTACHMENT A

FACILITY NAME: Riner STP
ADDRESS: 755 Roanoke Street, Suite D, Christiansburg, VA 24073

PERMIT NO.: VA0024040 OUTFALL NO.: 001

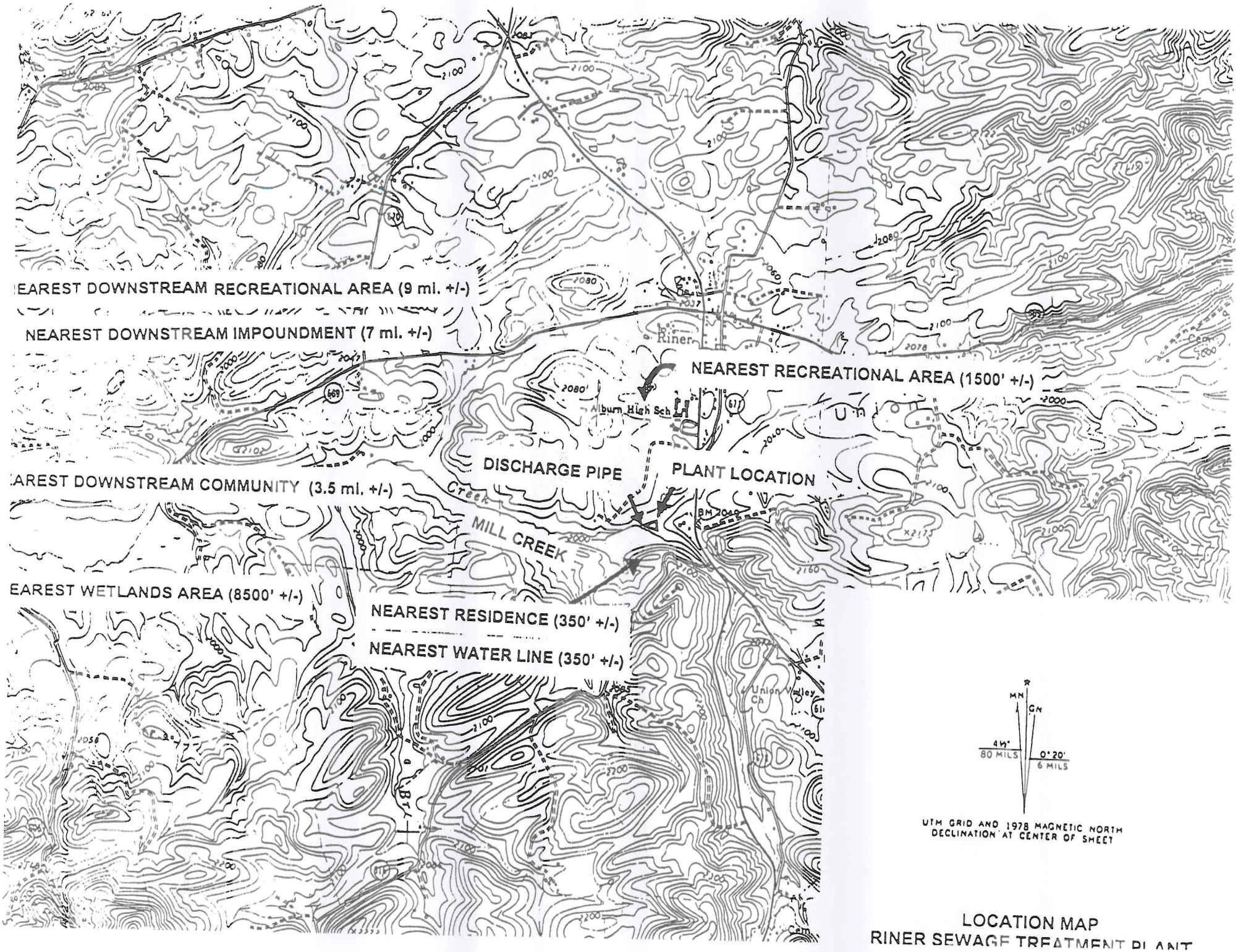
DEQ PARAM #	EPA PARAM #	CHEMICAL	EPA ANALYSIS NO.	QUANTIFICATION LEVEL[1]	REPORTING RESULTS	SAMPLE TYPE[2]	SAMPLE FREQUENCY[3]	SPECIFIC TARGET VALUE[4]
MISCELLANEOUS								
039	00610	Ammonia as NH3-N	350.1	200		C	X	NA
		Chlorides (mg/l)	(6)	(7)		C	X	NA
005	50060	Chlorine, Total Residual	(6)	100		G	X	NA
018	00720	Cyanide	335.2	10.0		G	X	NA
137	00900	Hardness (as mg/l $CaCO_3$)	(6)	(7)		C	1/3 Months	NA
		Hydrogen Sulfide	(6)	(7)		G	X	NA
		Nitrate (as mg/l N)	(6)	(7)		C	X	NA
350	30340	Tributyltin[9]	NBSR 85-3295	(7)		C	X	NA
252	81551	Xylenes (total)	SW 846 Method 8021B	(7)		G	X	NA

BECKE R. JONES WASTEWATER SUPERVISOR
Name of Principal Exec. Officer or Authorized Agent / Title

Signature of Principal Officer or Authorized Agent / Date 3-13-08

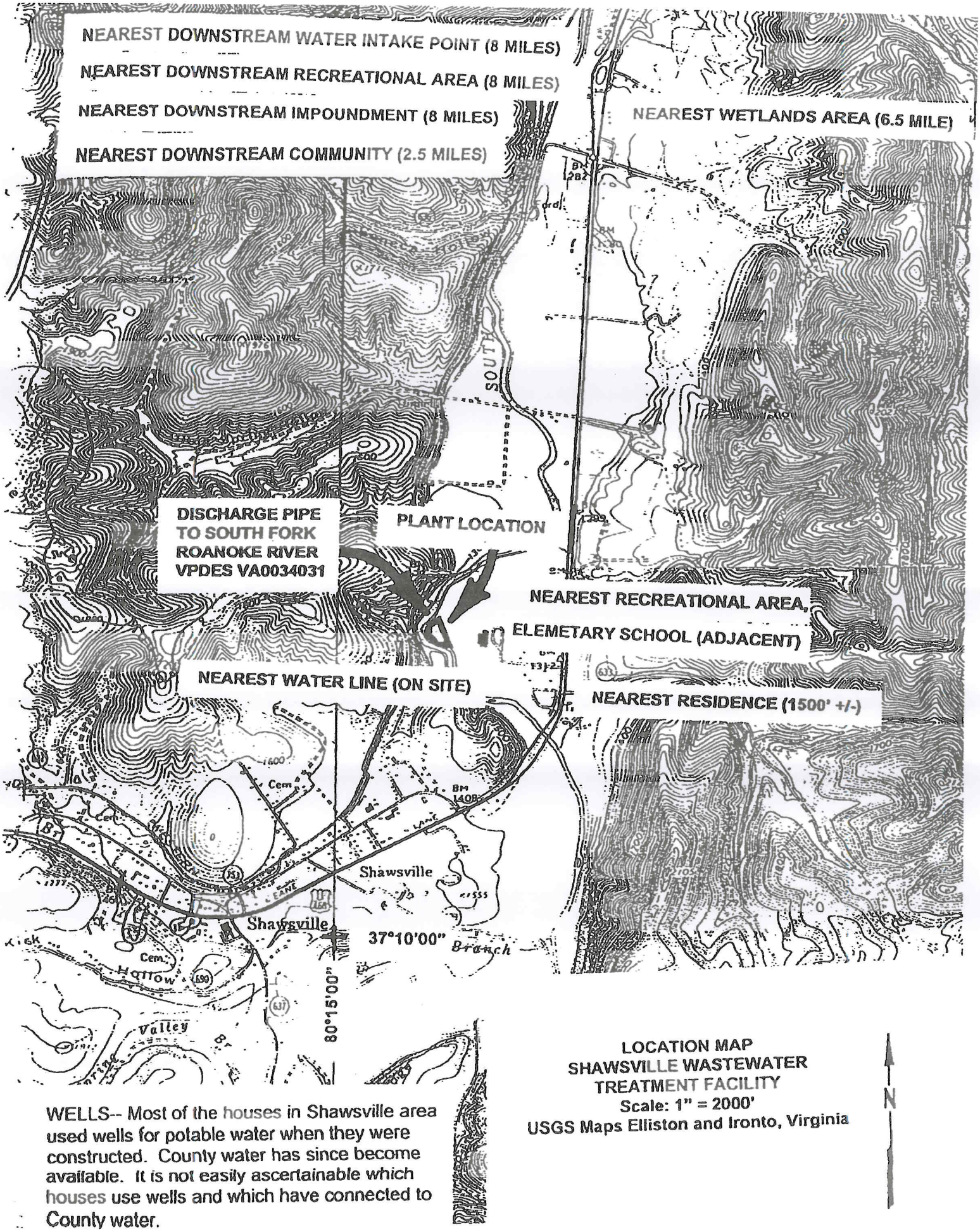
I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment for knowing violations. See 18 U.S.C. '1001 and 33 U.S.C. '1319. (Penalties under these statutes may include fines up to $10,000 and or maximum imprisonment of between 6 months and 5 years.)

ATTACHMENT # 4



UTM GRID AND 1978 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

LOCATION MAP
RINER SEWAGE TREATMENT PLANT



WELLS-- Most of the houses in Shawsville area used wells for potable water when they were constructed. County water has since become available. It is not easily ascertainable which houses use wells and which have connected to County water.

LOCATION MAP
SHAWSVILLE WASTEWATER
TREATMENT FACILITY
Scale: 1" = 2000'
USGS Maps Elliston and Ironto, Virginia

N

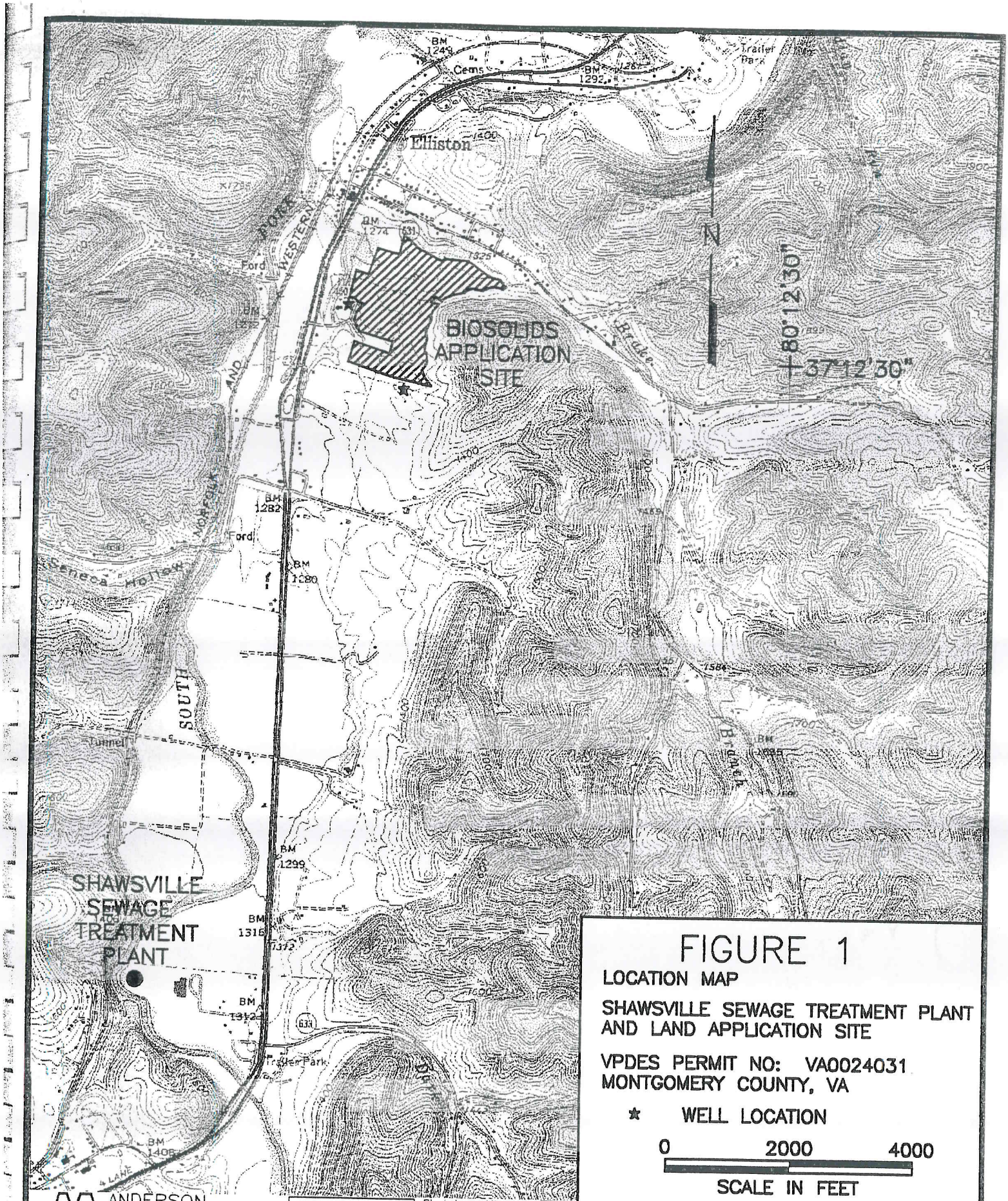


FIGURE 1

LOCATION MAP

SHAWSVILLE SEWAGE TREATMENT PLANT AND LAND APPLICATION SITE

VPDES PERMIT NO: VA0024031
MONTGOMERY COUNTY, VA

★ WELL LOCATION

0 2000 4000

SCALE IN FEET

ANDERSON AND ASSOCIATES, Inc.
Engineers
Surveyors
Planners
Blacksburg, VA
Greensboro, NC
Middletown, VA
Richmond, VA
Tri-Cities, TN

DRAWN	SCALE	DATE	DOCUMENT NO.
AJC	AS SHOWN	14 JUL 98	15409-001

FIG1.DWG | 980709.1158 | AJC@AJC

ATTACHMENT # 5

The Riner Wastewater Treatment facility is an extended aeration package plant designed for a flow of 0.10 MGD, and currently operating at an average flow of 0.019 MGD. Wastewater flows through a bar screen, into an equalization basin, and is pumped into aeration basins, then flows into secondary clarifiers. Clarified effluent leaves the secondary clarifiers via weir troughs and flows through UV disinfection, a post aeration basin, and a parshall flume to the outfall pipe into Mill creek.

Sludge is air lifted from the secondary clarifiers to the aerobic sludge digesters or returned to the aeration basins. Sludge undergoes aerobic digestion in the digesters, and is thickened by periodically decanting supernatent from the digesters. Digester supernatent is returned to the head of the plant for further treatment.

Sludge disposal is accomplished by pumping the sludge from the digesters to a mechanical belt press for dewatering. The belt press will produce a sludge that consists of 11% to 14 % solids. The dewatered sludge is hauled by dump truck to the Shawsville Sewage Treatment Plant for blending, storage, and eventual land application. Prior to transportation of the dewatered sludge the sludge must be able to pass a paint filter test in order to prevent any spills from the dump truck. Sludge is transported between the hours of 7 a.m. and 3 p.m. , Monday through Friday.

Class B pathogen reduction is achieved through alternative #1, which measures the fecal density (the ceiling is 2,000,000 MPN or CFU per gram). Vector attraction reduction is achieved by digesting the sludge until a Specific Oxygen Uptake Rate (SOUR) of < 1.5 milligrams of oxygen per hour per gram of total solids is achieved.

ATTACHMENT # 6

PROCHEM Analytical Incorporated

Final Report

PCA Order No.: 418047
Report Date: 3/17/2008
Client: Montgomery County Public Service Authority
Project: Riner STP

Sample Number: 418047-02
Description: Digestor - South
Date Collected: 3/4/2008
Matrix: Wastewater
Time Collected: 10:45
Sample Type: Grab

Analysis	Result	Reporting Limit	Units	Date Analyzed	Time Analyzed	Analyst	Method
Arsenic	0.020	0.005	mg/L	3/5/2008	16:45	CDM	EPA 200.7
Cadmium	0.044	0.001	mg/L	3/5/2008	16:45	CDM	EPA 200.7
Chromium	0.190	0.005	mg/L	3/5/2008	16:45	CDM	EPA 200.7
Copper	6.37	0.005	mg/L	3/5/2008	16:45	CDM	EPA 200.7
Lead	0.527	0.005	mg/L	3/5/2008	16:45	CDM	EPA 200.7
Mercury	0.0021	0.0002	mg/L	3/7/2008	08:59	CDM	EPA 245.1
Molybdenum	0.060	0.005	mg/L	3/5/2008	16:45	CDM	EPA 200.7
Nickel	0.206	0.005	mg/L	3/5/2008	16:45	CDM	EPA 200.7
Selenium	0.072	0.005	mg/L	3/5/2008	16:45	CDM	EPA 200.7
Zinc	15.2	0.005	mg/L	3/5/2008	16:45	CDM	EPA 200.7

ProChem Analytical Incorporated
6040 North Fork Road
Elliston, VA 24087
Phone (540) 268-9884
FAX (540) 268-2755

Analytical Request and Chain of Custody Form

PCA Order ID # 418047

Page ____ of ____
Is Order Complete? ☐ Yes ☐ No

Please Print. See Chain of Custody Instructions for additional help with corresponding numbers.

1. Mail Report to:	
Company Name:	Montgomery County PSA
Attention:	(Mr.) / Ms. Bruce R. Jones
Address:	755 Roanoke St Suite 2-I
City, State, Zip:	Christiansburg VA 24073
Telephone:	540-268-5143 FAX: Same
Email:	Jonesbe@ntelos.net

2. Bill to:	
Company Name:	
Attention:	Mr. / Ms. SAME
Address:	
City, State, Zip:	
Telephone:	
Purchase Order No.:	Quotation No.:

3. Turn Around Time Request
☐ Standard Business Day
☐ 3-4 Business Day Rush
☐ 2 Business Day Rush

Note: All rush turn around times are subject to ProChem Analytical approval and additional fees.

LAB USE ONLY: PCA Sample ID Number	pH at Receipt in Lab (S.U.)	4. Project Name / 5. Sample Location or ID	6. Sample Type (Check One): Composite	Composite of Grabs	Grab	7. Collection Dates/Times: Composite Begin Date / Time	Composite End Date / Time	Grab Date(s) / Time(s)	8. Matrix (See Key Below)	9. Container Type (Plastic/Glass/Other)	10. # of Containers	11. Preservative (See Key Below)	12. Requested Analyses
418047		Riner STP											
-01 NH3 H2SO4		001 OUTFALL			✓			3-4-08 10:20Am	WW	PLASTIC	1	H_2SO_4	Ammonia
02		001 OUTFALL			✓			3-4-08 10:25Am	WW	PLASTIC	1	H_2SO_4	nitrate/nitrite
OG		001 OUTFALL			✓			3-4-08 10:35Am	WW	GLASS	1	H_2SO_4	Oil And Grease
TP		001 OUTFALL			✓			3-4-08 10:35Am	WW	PLASTIC	1	H_2SO_4	Phosphorus
TDS		001 OUTFALL			✓			3-4-08 10:40Am	WW	Plastic	1	none	TOTAL Dissolved Solids
02+ <2+		Digester-South			✓			3-4-08 10:45Am	WW	PLASTIC	1	HNO_3	metals - Arsenic, Cadmium, Chromium, Copper, Lead, Mercury, Molybdenum, Nickel, Selenium, Zinc *

*pH of O & G checked at time of analysis

13. QA/QC Package Request (please circle one): I II III IV V (Custom)

Matrix Key:
DW = Drinking Water; GW = Groundwater; LE = Leachate; LI = Liquid; OI = Oil; OT = Other; SL = Sludge; SO = Soil; ST = Storm Water; SU = Surface Water; SD = Solid; WW = Wastewater

Preservative Key:
None = No Preservative; H_2SO_4 = Sulfuric Acid; HNO_3 = Nitric Acid; HCl = Hydrochloric Acid; NaOH = Sodium Hydroxide; $(CH_3CO_2)_2ZN$ = Zinc Acetate; $C_{10}H_{14}O_8N_2Na_2$ = EDTA; $Na_2S_2O_3$ = Sodium Thiosulfate

14. Request for Additional Reporting (please check all that apply):
☐ via Fax (extra fee after 1st fax) ☑ via Email (no extra fee) ☐ via CD-ROM (extra fee)

16. Sampler(s) (Printed Name and Signature):
Greg Criner Greg Criner

15. Comments: * 1.5 mLs of HNO_3 added to sample to PCH level a pH of <2 SU.

17. Relinquished by (Signature):	Date/Time	18. Received by (Signature):	Date/Time
Greg Criner	3-4-08 12:03pm	Amanda	3-4-08 1203
17. Relinquished by (Signature):	Date/Time	18. Received by (Signature):	Date/Time
17. Relinquished by (Signature):	Date/Time	18. Received by (Signature):	Date/Time

Lab Use Only:
Temperature upon receipt in lab = 4 °C
Samples Transported on ice? ☑ Yes ☐ No ☐ N/A
PCA Project Manager: ____
Method of Shipment: ☐ PCA Personnel ☑ Client Personnel ☐ UPS ☐ FedEx ☐ Airborne ☐ USPS Other ____

ATTACHMENT # 7

COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

James S. Gilmore, III
Governor

John Paul Woodley, Jr.
Secretary of Natural Resources

West Central Regional Office
3019 Peters Creek Road, Roanoke, Virginia 24019
Telephone (540) 562-6700, Fax (540) 562-6725
http://www.deq.state.va.us

Dennis H. Treacy
Director

Thomas L. Henderson
Regional Director

April 26, 2000

Mr. Bruce Jones
Montgomery County PSA
P.O. Box 746
Christiansburg, VA 24068

RE: Shawsville STP - Laboratory Assistance Inspection
Sludge Monitoring - Pathogen Reduction
VPDES Permit No. VA0024031

Dear Mr. Jones:

On March 31, 2000, a laboratory assistance inspection was conducted at the above referenced facility. The inspection was conducted by J.D. Scott, Environmental Inspector Senior. The purpose of the inspection was to discuss the alternatives available to the facility regarding pathogen reduction, and the documentation requirements associated with each alternative.

A copy of the memorandum detailing the inspection is attached. If there are any questions regarding the inspection or other issues relating to laboratory operations, please do not hesitate to call Mr. Scott at the West Central Regional Office (540-562-6827).

Sincerely,

Samuel C. Hale

Samuel C. Hale
Environmental Inspector Supervisor

Attachment

Copies: W.E. Purcell - DEQ-Water/OWPS
J. D. Scott - DEQ-Water/Roanoke

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER DIVISION - WEST CENTRAL REGIONAL OFFICE

3019 PETERS CREEK ROAD ROANOKE, VA 24019

MEMORANDUM

SUBJECT: LABORATORY ASSISTANCE INSPECTION
PATHOGEN REDUCTION REQUIREMENTS
CLARIFICATION OF REGULATORY REQUIREMENTS
SHAWSVILLE STP - VPDES PERMIT NO. VA0024031

TO: Sam Hale

FROM: J. D. Scott

DATE: April 13, 2000

COPIES: File, Jason Winnington

On March 31, 2000, the writer visited with Mr. Bruce Jones to discuss monitoring requirements of the VPDES Permit for the wastewater plant which approved the current Sludge Management Plan for Land Application. Issues regarding the documentation of pathogen reduction requirements for land application of Class B sludge from facilities utilizing Option #1 (aerobic digestion), under Alternative #2 - Processes that Significantly Reduce Pathogens were discussed. When this option is selected, documentation demonstrating the time-temperature requirements [MCRT of 40 days at 20^0 Celsius or 60 days at 15^0 Celsius] must be available. The facilities in this region utilizing aerobic digestion have been unable to adequately demonstrate that they are capable of meeting these regulatory time-temperature requirements. Therefore, these facilities can best demonstrate pathogen reduction compliance by utilizing Alternative #1, which measures fecal density (the ceiling is 2,000,000 MPN or CFU per gram).

The sludge generated by three wastewater treatment facilities owned by the Montgomery County PSA is all regulated under the Shawsville VPDES permit, which also approved the Sludge Management Plan. Sludge from the digestor at each facility is dewatered on-site with the aid of a portable belt press, then taken to the Shawsville STP, to a covered "blending" facility. After blending, the dewatered sludge from the three facilities can be stored until use (land applied). Prior to use, as described in the regulations, the sludge "batch" can then be sampled in accordance with Part IA of the VPDES Permit. The sampling frequency, based on volume generated (production) from all three facilities combined, is once per year, with the exception of percent solids, which must be analyzed at each land application event (PAN values are calculated). These issues are explained in the Statement of Basis of the Shawsville STP. In the SOB, it is clearly noted that the fecal density (Alternative #1) results will adequately demonstrate compliance with pathogen reduction. At this time, Specific Oxygen Uptake Rates (SOURs) remain as the option to demonstrate vector attraction reduction.

PROCHEM
Analytical Incorporated

PCA Order No.: 418676
Client: Montgomery County Public Service Authority
Project: Riner STP

Final Report
Report Date: 4/18/2008

Sample Number: 418676-01
Date Collected: 4/9/2008
Time Collected: 10:00

Description: Plant Outfall 001
Matrix: Wastewater
Sample Type: Grab

Analysis	Result	Reporting Limit	Units	Date Analyzed	Time Analyzed	Analyst	Method
Copper, Dissolved	0.012	0.005	mg/L	4/15/2008	09:00	CDM	EPA 200.7
Silver, Dissolved	< 0.002	0.002	mg/L	4/15/2008	09:00	CDM	EPA 200.7

RECEIVED
MAY 0 9 2008
DEQ-WCRO

6040 North Fork Road Elliston, Virginia 24087 Phone: (540) 268-9884 Fax: (540) 268-2755

PROCHEM
6040 North Fork Road
Elliston, VA 24087
O: (540) 268-9884
F: (540) 268-2755

Analytical Request and Chain of Custody Form

PCA Order No.: 418676

Page ___ of ___

Please Print. See Chain of Custody Instructions for additional help with corresponding numbers.

Order Complete? (Circle) Yes No

1. Client Information	PO No.:
Company:	RINER STP
Attention:	BRUCE JONES
Address:	755 ROANOKE ST. SUITE 2F
City, State, Zip:	CHRISTIANSBURG, VA. 24073
Telephone:	540-268-5143
Fax:	SAME
Email:	JONESBE@NTELOS.NET

2. Billing Information	Contract No.:
Company:	Montgomery County PSA
Attention:	← SAME
Address:	
City, State, Zip:	
Telephone:	Fax:
Email:	
LAB USE ONLY:	Invoice Status: ☐ To be Billed ☐ Paid Invoice Location: ☐ Elliston ☐ Forest

3. Turn Around Time Request
- ☑ Standard Business Day (10 Days)
- ☐ 7-9 Business Day Rush (____ Days)
- ☐ 4-6 Business Day Rush (____ Days)
- ☐ <3 Business Day Rush (____ Days)

Note: All rush orders are subject to approval and additional fees

☐ DMR (See #13 below)

LAB USE ONLY: PCA Sample ID Number	FTC	pH in Lab (SU)	4. Project Name / 5. Sample Location or ID	6. Sample Type: Composite	Composite of Grabs	Grab	7. Collection Dates / Times: Composite Begin Date / Time	Composite End Date / Time	Grab Date / Time	Filtered (If Req.) Date / Time	8. Matrix (See Key Below)	9. Container Type	10. No. of Containers	11. Preservative (See Key Below)	12. Requested Analyses
418676-01	D	4.2	RINER STP / PLANT OUTFALL001			✓			4-9-08 10 AM	4-9-08 2 PM	WW	P	1	E	Dissolved Copper; Dissolved Silver

RECEIVED
MAY 04 2008
DEQ-WCRO

13. DMR (Discharge Monitoring Report) required by the DEQ (Dept. of Environmental Quality), due by _____ (date).

14. QA/QC Package Request (please circle one): I II III IV Custom

15. Comments:

Matrix Key:

DW = Drinkingwater	OI = Oil
LE = Leachate	LI = Liquid
GW = Groundwater	SL = Sludge
ST = Stormwater	SD = Solid
SU = Surfacewater	SO = Soil
WW = Wastewater	OT = Other

16. Sampler(s) (Name & Signature, Date & Time): GREG CRINER — Bruce Jones signing for GREG CRINER

17. Relinquished (Signature, Date & Time): Randall S Julian 4-11-08 9:00AM

17. Received (Signature, Date & Time): 4/11/08 0900

17. Relinquished (Signature, Date & Time):

17. Received (Signature, Date & Time):

17. Relinquished (Signature, Date & Time):

17. Received (Signature, Date & Time):

LAB USE ONLY

Temperature upon receipt in lab = 3 °C

Samples Transported on Ice? (Yes) No N/A

Method of Shipment: PCA (Client) UPS FedEx USPS DHL PCI Other:_____

Preservative Key:

A. None = No Preservative B. NAOH = Sodium Hydroxide C. H_2SO_4 = Sulfuric Acid D. $(CH_3CO_2)_2ZN$ = Zinc Acetate

E. HNO_3 = Nitric Acid F. $C_{10}H_{14}O_8N_2Na_2$ = EDTA G. HCl = Hydrochloric Acid H. $Na_2S_2O_3$ = Sodium Thiosulfate

18. Sample Disposal:

Samples are to be disposed of 60 Days after time of receipt, unless they are for EPA or a Landfill, or unless otherwise noted.

☐ Please check here if client would like to retain sample 60 Days after lab's receipt. (If box is not checked, lab will dispose of sample 60 days after lab receipt.)

☐ Please check here if client would like lab to retain sample longer than 60 Days. (Please have this approved with the lab. If box is not checked, lab will dispose of sample 60 days after lab receipt)

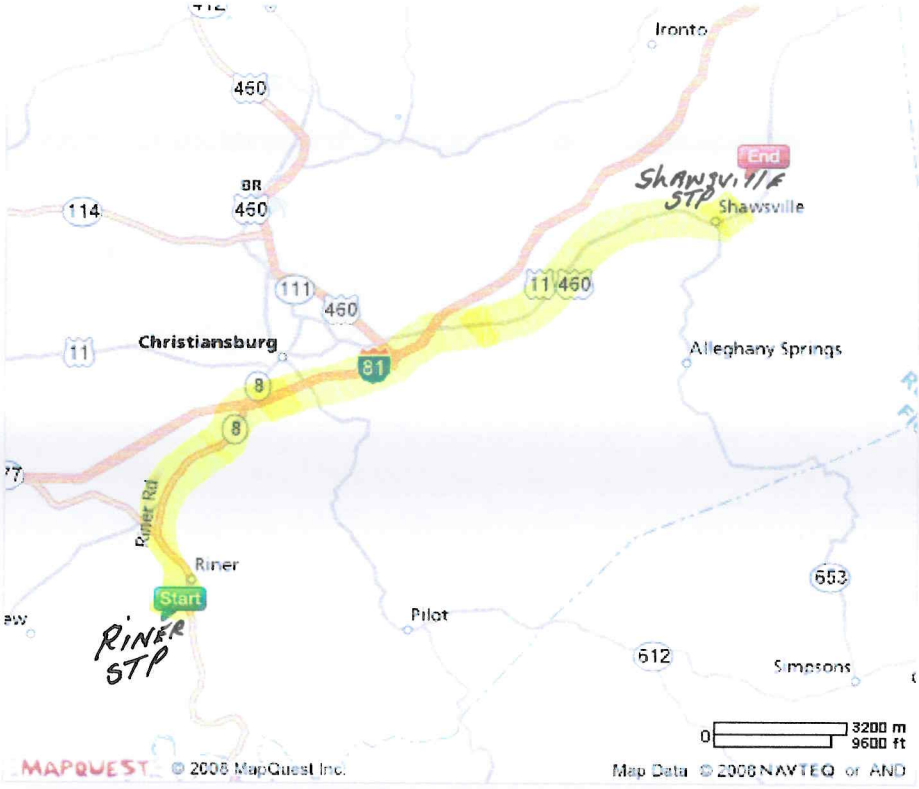
ATTACHMENT # 8

Shawsville STP is also owned and operated by Montgomery County Public Service Authority, therefore all Riner STP operational and test data is available to Shawsville STP personnel.

ATTACHMENT # 9

Sludge generated at Riner STP is dried on the belt press, and is transported to the receiving facility by dump truck, if the sludge passes a paint filter test.

Sorry! When printing directly from the browser your map may be incorrectly cropped. To print the entire map, try clicking the **"Printer-Friendly"** link at the top of your results page.



Sorry! When printing directly from the browser your map may be incorrectly cropped. To print the entire map, try clicking the **"Printer-Friendly"** link at the top of your results page.

MAPQUEST.
An AOL Company

START **4351 Riner Rd**
Riner, VA 24149-2517, US

END **4300 Riffe St**
Elliston, VA 24087-4356, US

Total Est. Time:
22 minutes

Total Est. Distance:
17.26 miles

Maneuvers		Distance
START	**1:** Start out going NORTH on RINER RD / VA-8 N toward FIVE POINTS RD. Continue to follow VA-8 N.	4.8 miles
NORTH 81	**2:** Merge onto I-81 N.	2.2 miles
8A-B EXIT	**3:** Take EXIT 118A-B-C toward US-11 / CHRISTIANSBURG / US-460 / BLACKSBURG.	1.5 miles
118C EXIT	**4:** Take the US-11 / US-460 E exit- EXIT 118C- toward US-460-BR / SHAWSVILLE / ELLISTON.	0.3 miles
NORTH 11	**5:** Turn RIGHT onto US-11 N / US-460 E / ROANOKE ST. Continue to follow US-11 N / US-460 E.	7.7 miles
	6: Turn LEFT onto RIFFE ST.	0.4 miles
END	**7:** End at **4300 Riffe St** Elliston, VA 24087-4356, US	

Total Est. Time: 22 minutes **Total Est. Distance:** 17.26 miles

RINER S.T.P. MONTH April
MONTHLY OPERATIONS REPORT YEAR 2007

DAY	VOLATILE SOLIDS mg/L					TEMP. oC		SLUDGE AGE		FM / RATIO	
	SOUTH AER.	NORTH AER	SOUTH DIG.	NORTH DIG.	RETURN SLUDGE	RAW	FINAL	SOUTH AER.	NORTH AER.	SOUTH AER.	NORTH AER.
1						14	14				
2						14.9	15.7				
3		2615			3470	14.1	14.9		27		0.029
4						14.7	15.9				
5						13.3	13.6				
6						11	12.6				
7						10.3	10.7				
8						9.9	9.3				
9						9.9	9.6				
10		3005			3795	10.9	10		47		0.022
11						11.4	10.8				
12						11.7	10.8				
13						11.9	11				
14						12.2	11.8				
15						11.4	12.3				
16						10.8	11				
17		3010			4950	11.2	11.2		41		0.024
18						11.6	11.8				
19						12.2	12.7				
20						12.4	13				
21						13.5	12				
22						13.3	13				
23						13.9	14.7				
24		2640			10470	14.8	15.9		40		0.031
25						15.8	16.8				
26						15.4	16.8				
27						16	17.5				
28						15	16.8				
29						14.5	16.1				
30						14.4	16.4				
31											
TOTAL	0	11270	0	0	22685	386.4	398.7	0	154	0.000	0.105
AVG.	ERR	2818	ERR	ERR	5671	13	13	ERR	39	ERR	0.026

RINER S.T.P. MONTH MAY
MONTHLY OPERATIONS REPORT YEAR 2007

DAY	VOLATILE SOLIDS mg/L					TEMP. oC		SLUDGE AGE		FM RATIO	
	SOUTH AER.	NORTH AER	SOUTH DIG.	NORTH DIG.	RETURN SLUDGE	RAW	FINAL	SOUTH AER.	NORTH AER.	SOUTH AER.	NORTH AER.
1		2130			5750	16	17.3		26		0.055
2						16.3	18.1				
3						16.2	17.7				
4						14.9	15.9				
5						14.5	15.7				
6						14.2	15.4				
7						13.4	14.8				
8		1975			5640	15	15.6		12		0.069
9						16.2	16.5				
10						16.4	17				
11						17.7	18.8				
12						18.2	19				
13						16.9	19				
14						14.8	17.8				
15		1925			4270	17.2	18.6		24		0.047
16						17.4	18.9				
17						16.2	17.5				
18						15.2	17.6				
19						14.6	15.6				
20						14.9	16.1				
21						16.1	17.3				
22		1875			2775	17.4	18.1		24		0.044
23						18.1	19.1				
24						17.3	18.9				
25						17.1	19.3				
26						18.5	19				
27						19.3	21				
28						18.9	21				
29		1780			4275	18.6	20.8		10		0.075
30						18.7	21.1				
31						18.7	21.2				
TOTAL	0	9685	0	0	22710	514.9	559.7	0	96	0.000	0.291
AVG.	ERR	1937	ERR	ERR	4542	17	18	ERR	19	ERR	0.058

RINER S.T.P. MONTH June
MONTHLY OPERATIONS REPORT YEAR 2007

DAY	VOLATILE SOLIDS mg/L					TEMP. oC		SLUDGE AGE		FM / RATIO	
	SOUTH AER.	NORTH AER	SOUTH DIG.	NORTH DIG.	RETURN SLUDGE	RAW	FINAL	SOUTH AER.	NORTH AER.	SOUTH AER.	NORTH AER.
1						19	20.9				
2						19.2	21				
3						18.5	20.4				
4						18.3	20.2				
5		2065			4015	19.1	20.3		14		0.076
6						18.3	20				
7						18.4	20				
8						19.1	20.6				
9						20.2	22.2				
10						19.3	21.5				
11						19.9	22.5				
12		1985			2915	19.7	21.5		20		0.014
13						19.4	21.6				
14						19	20.9				
15						18.6	19.7				
16						19.4	20				
17						20	21				
18						19.7	20.8				
19		2385			3270	20.5	21.9		38		0.033
20						20.7	22.3				
21						18.9	21.2				
22						19.2	21.5				
23						19	21.3				
24						20.6	21.9				
25						20.5	21.7				
26		1980			2970	21.3	22.6		16		0.056
27						20.9	23				
28						21.1	23				
29						20.8	23.1				
30						21.4	22.8				
31											
TOTAL	0	8415	0	0	13170	590	641.4	0	88	0.000	0.179
AVG.	ERR	2104	ERR	ERR	3293	20	21	ERR	22	ERR	0.045

RINER S.T.P. MONTH July
MONTHLY OPERATIONS REPORT YEAR 2007

DAY	VOLATILE SOLIDS mg/L					TEMP. oC		SLUDGE AGE		FM / RATIO	
	SOUTH AER.	NORTH AER	SOUTH DIG.	NORTH DIG.	RETURN SLUDGE	RAW	FINAL	SOUTH AER.	NORTH AER.	SOUTH AER.	NORTH AER.
1						19.8	21.8				
2						19.5	21.3				
3		2260			2235	20.2	21.5		103		0.017
4						19.7	21.7				
5						21.1	22.1				
6						21.5	22.8				
7						21.3	22.9				
8						21.1	23				
9						21.9	23.5				
10		1955			4235	22.4	23.7		14		0.073
11						21.8	23.5				
12						21.1	22.9				
13						20	21.9				
14						20.5	22				
15						21.1	22				
16						21.4	22.5				
17		1760			3150	21.7	22.6		16		0.044
18						21.5	22.7				
19						21.7	22.7				
20						21.4	22.8				
21						20.2	22.1				
22						19.8	21.3				
23						19.3	20.8				
24		1640			2170	19.7	20.4		15		0.058
25						20.1	20.2				
26						20.6	20.6				
27						20.9	21.1				
28						20.6	21.4				
29						20.6	21.8				
30						22	22.8				
31		2005			3945	21.8	22.9		44		0.008
TOTAL	0	9620	0	0	15735	646.3	685.3	0	192	0.000	0.200
AVG.	ERR	1924	ERR	ERR	3147	21	22	ERR	38	ERR	0.040

RINER S.T.P. MONTH August
MONTHLY OPERATIONS REPORT YEAR 2007

DAY	VOLATILE SOLIDS mg/L					TEMP. oC		SLUDGE AGE		FM/RATIO	
	SOUTH AER.	NORTH AER	SOUTH DIG.	NORTH DIG.	RETURN SLUDGE	RAW	FINAL	SOUTH AER.	NORTH AER.	SOUTH AER.	NORTH AER.
1						21.7	22.8				
2						21.4	23.2				
3						21.6	23.1				
4						21.9	23				
5						22.4	24				
6						22.7	23.6				
7		2180			2585	22.3	23.5		27		0.031
8						22.5	23.7				
9						22.3	23.9				
10						23.3	24.2				
11						22.3	24				
12						22.2	23.5				
13						22.3	23.9				
14		2065			3765	21.6	23.1		19		0.041
15						20.9	22.5				
16						21.7	22.9				
17						22.5	23.3				
18						21.9	23.5				
19						21.4	23.1				
20						22.5	23.1				
21		1915			4105	22.5	23.8		20		0.051
22						22.9	23.8				
23						23.4	24				
24						23.5	24.8				
25						23.3	25				
26						23.8	25.5				
27						23	24.4				
28		1790			3270	22.6	23.8		22		0.038
29						22.6	23.8				
30						22.5	24.5				
31						22.3	23.5				
TOTAL	0	7950	0	0	13725	693.8	734.8	0	88	0.000	0.161
AVG.	ERR	1988	ERR	ERR	3431	22	24	ERR	22	ERR	0.040

RINER S.T.P. MONTH September
MONTHLY OPERATIONS REPORT YEAR 2007

DAY	VOLATILE SOLIDS mg/L					TEMP. oC		SLUDGE AGE		FM / RATIO	
	SOUTH AER.	NORTH AER	SOUTH DIG.	NORTH DIG.	RETURN SLUDGE	RAW	FINAL	SOUTH AER.	NORTH AER.	SOUTH AER.	NORTH AER.
1						22.3	22.6				
2						21.2	22.5				
3						20.8	22				
4		1815			3525	21.3	22.3		17		0.060
5						21.2	21.9				
6						21.7	22.3				
7						21.6	22.6				
8						21.9	22.7				
9						21.2	22.5				
10						22.4	22.7				
11		2040			3575	22.6	23.5		18		0.054
12						21.2	22.3				
13						20.6	21.5				
14						21.4	22				
15						21.7	21.5				
16						20.3	20				
17						19.7	19.2				
18		1895			2475	19.3	18.9		18		0.047
19						19.5	19.1				
20						19.9	19.4				
21						21.1	20.4				
22						21.3	20.8				
23						21	21.3				
24						21.3	21.6				
25		1845			3380	20.9	21.1		16		0.062
26						21.4	22				
27						21.4	22.4				
28						21.1	21.1				
29						19.4	20				
30						18.4	18.9				
31											
TOTAL	0	7595	0	0	12955	629.1	641.1	0	70	0.000	0.223
AVG.	ERR	1899	ERR	ERR	3239	21	21	ERR	17	ERR	0.056

RINER S.T.P. MONTH October
MONTHLY OPERATIONS REPORT YEAR 2007

DAY	VOLATILE SOLIDS mg/L					TEMP. oC		SLUDGE AGE		FM / RATIO	
	SOUTH AER.	NORTH AER	SOUTH DIG.	NORTH DIG.	RETURN SLUDGE	RAW	FINAL	SOUTH AER.	NORTH AER.	SOUTH AER.	NORTH AER.
1						18.1	18.3				
2		2200			3505	18.1	18		20		0.052
3						19.9	19.2				
4						20.9	20.4				
5						21.6	21.7				
6						21.7	22				
7						21.1	21				
8						20.8	21.5				
9		2310			3630	20.9	21.2		30		0.039
10						21	21.2				
11						19.4	19.8				
12						18.7	18.3				
13						18.1	16.6				
14						17.3	16.4				
15						17.1	17				
16		2240			4265	18.2	16.9		25		0.037
17						19.1	17.9				
18						20	19.2				
19						20.4	20				
20						18.2	17.7				
21						17.3	17.3				
22						17	16.5				
23		2290			8270	19.2	18.3		17		0.063
24						19.7	19.6				
25						18.4	18.5				
26						17.4	17.7				
27						17.6	17				
28						16.7	17				
29						15.4	15.3				
30		2410			4215	13.6	13.9		62		0.024
31						15	14				
TOTAL	0	11450	0	0	23885	577.9	569.4	0	153	0.000	0.215
AVG.	ERR	2290	ERR	ERR	4777	19	18	ERR	31	ERR	0.043

RINER S.T.P. MONTH NOVEMBER
MONTHLY OPERATIONS REPORT YEAR 2007

DAY	VOLATILE SOLIDS mg/L					TEMP. oC		SLUDGE AGE		FM / RATIO	
	SOUTH AER.	NORTH AER	SOUTH DIG.	NORTH DIG.	RETURN SLUDGE	RAW	FINAL	SOUTH AER.	NORTH AER.	SOUTH AER.	NORTH AER.
1						15	13.9				
2						15.6	14.1				
3						14	13.2				
4						14	13.3				
5						14.2	13.7				
6		3015			3585	15	12.7		22		0.038
7						14.4	12.5				
8						12.6	11.4				
9						13.6	11.7				
10						13.1	11.5				
11						12	12.4				
12						13.7	12.1				
13		2780			5715	15	13.5		28		0.039
14						15.1	14.3				
15						15.2	14.5				
16						13	13.3				
17						12.9	12				
18						12.2	11				
19						13.7	12.4				
20		2540			3390	15	13.7		14		0.057
21						14.7	14.3				
22						15.1	13.9				
23						13	13.5				
24						11.3	11.3				
25						11.5	11				
26						13	12.8				
27		3200			5880	13.8	11.8		41		0.026
28						12.3	12				
29						12.2	10.9				
30						12.3	10.3				
31											
TOTAL	0	11535	0	0	18570	408.5	379	0	105	0.000	0.160
AVG.	ERR	2884	ERR	ERR	4643	14	13	ERR	26	ERR	0.040

RINER S.T.P. MONTH DECEMBER
MONTHLY OPERATIONS REPORT YEAR 2007

DAY	VOLATILE SOLIDS mg/L					TEMP. oC		SLUDGE AGE		FM / RATIO	
	SOUTH AER.	NORTH AER	SOUTH DIG.	NORTH DIG.	RETURN SLUDGE	RAW	FINAL	SOUTH AER.	NORTH AER.	SOUTH AER.	NORTH AER.
1						12.3	10.9				
2						11.6	11.2				
3						11.9	10.5				
4		2365			2365	11.1	10		16		0.072
5						11.4	9.6				
6						11.8	9.8				
7						11.2	9.6				
8						12.3	9				
9						12.8	11				
10						14.1	13.5				
11		2825			7470	14.1	13.5		25		0.032
12						15.1	14.6				
13						14.5	14.4				
14						13.9	13.8				
15						12.5	12.2				
16						11.5	10.9				
17						9.8	9.7				
18		3615			8285	10.1	8.2		33		0.026
19						10.6	9.2				
20						10.9	9				
21						11.1	9.1				
22						10.3	9.7				
23						10.1	10				
24						10.3	9.4				
25		2785			2705	10.4	9.6		31		0.034
26						10	8.9				
27						10.6	9.5				
28						10.4	10				
29						10.9	11				
30						10.7	10.8				
31						10.5	10				
TOTAL	0	11590	0	0	20825	358.8	328.6	0	106	0.000	0.165
AVG.	ERR	2898	ERR	ERR	5206	12	11	ERR	27	ERR	0.041

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RINER S.T.P. MONTH January
MONTHLY OPERATIONS REPORT YEAR 2008

	VOLATILE SOLIDS mg/L					TEMP. oC		SLUDGE AGE		FM / RATIO	
DAY	SOUTH AER.	NORTH AER	SOUTH DIG.	NORTH DIG.	RETURN SLUDGE	RAW	FINAL	SOUTH AER.	NORTH AER.	SOUTH AER.	NORTH AER.
1		3530			3410	10.1	10.3		42		0.019
2						8.3	7.1				
3						7.1	7.2				
4						6.3	6.9				
5						7.9	7.1				
6						8.2	8.6				
7						10.3	9.8				
8		2930			3325	11.4	10.1		11		0.092
9						12.2	11.8				
10						9.9	10.4				
11						11.7	11.8				
12						8.5	8.3				
13						8.3	8.4				
14						9.2	9				
15		2985			5885	8.5	7.3		11		0.086
16						7.5	8.5				
17						7.2	8				
18						9.6	8.4				
19						7.1	6.5				
20						5	5.5				
21						5.1	6.2				
22		3020			4835	6.9	4.9		21		0.059
23						8.4	7.2				
24						7.1	6.5				
25						5.5	6.5				
26						8.5	7.2				
27						9.2	7.7				
28						8.5	7.9				
29		3975			6205	9.6	7		12		0.063
30						8.4	8.2				
31						6.3	7.1				
TOTAL	0	16440	0	0	23660	257.8	247.4	0	97	0.000	0.319
AVG.	ERR	3288	ERR	ERR	4732	8	8	ERR	19	ERR	0.064

RINER S.T.P. MONTH February
MONTHLY OPERATIONS REPORT YEAR 2008

DAY	VOLATILE SOLIDS mg/L					TEMP. oC		SLUDGE AGE		FM / RATIO	
	SOUTH AER.	NORTH AER	SOUTH DIG.	NORTH DIG.	RETURN SLUDGE	RAW	FINAL	SOUTH AER.	NORTH AER.	SOUTH AER.	NORTH AER.
1						8.3	8				
2						8.6	8.6				
3						8.4	8.5				
4						10	9				
5		4005			3985	11.5	10.6		8		0.094
6						12.1	12				
7						10	12.3				
8						9.4	10.9				
9						8.6	9.5				
10						8	9				
11						6.4	8.5				
12		2635			4810	8.1	8		6		0.101
13						9	8.8				
14						6.9	7.1				
15						9.8	9.2				
16						9.2	9.4				
17						9.7	10				
18						12.2	11.9				
19		3525			4945	9	10.4		17		0.048
20						8.5	9.9				
21						7.9	7.8				
22						8.7	8.6				
23						9.6	9.9				
24						8.6	9.2				
25						9.4	9.2				
26		3415			5085	10.4	9.2		8		0.086
27						8.5	9				
28						7.2	7.7				
29						7.3	8.3				
30											
31											
TOTAL	0	13580	0	0	18825	261.3	270.5	0	39	0.000	0.329
AVG.	ERR	3395	ERR	ERR	4706	9	9	ERR	10	ERR	0.082

RINER S.T.P. MONTH March
MONTHLY OPERATIONS REPORT YEAR 2008

DAY	VOLATILE SOLIDS mg/L					TEMP. oC		SLUDGE AGE		FM / RATIO	
	SOUTH AER.	NORTH AER	SOUTH DIG.	NORTH DIG.	RETURN SLUDGE	RAW	FINAL	SOUTH AER.	NORTH AER.	SOUTH AER.	NORTH AER.
1						8.3	7				
2						8.4	7				
3						10.8	10.2				
4		3415			3060	12.2	12		13		0.088
5						10	11.8				
6						8.9	9.9				
7						10.2	11.5				
8						11.3	11.7				
9						9	9.4				
10						8.1	9.3				
11		3550			7635	10	9.6		10		0.080
12						9.3	10.3				
13						9.8	10.2				
14						10.3	11.2				
15						10.6	12.1				
16						10.4	12				
17						10.2	11.2				
18		3620			3920	10.5	11.2		11		0.056
19						12.4	12.9				
20						10.7	12.5				
21						9.3	12.2				
22						11	11				
23						10.4	11.2				
24						10	11.5				
25		3360			3075	9.3	9.4		17		0.053
26						10.2	11.6				
27						11.8	12				
28						13.5	14				
29						10.6	12.4				
30						10.2	12.1				
31						10.9	12.1				
TOTAL	0	13945	0	0	17690	318.6	342.5	0	51	0.000	0.277
AVG.	ERR	3486	ERR	ERR	4423	10	11	ERR	13	ERR	0.069

					min		max
1	1 FLOW	10-May-07	0.02	0.054	NULL	NULL	NULL
1	1 FLOW	10-Jun-07	0.018	0.028	NULL	NULL	NULL
1	1 FLOW	10-Jul-07	0.017	0.038	NULL	NULL	NULL
1	1 FLOW	10-Aug-07	0.016	0.029	NULL	NULL	NULL
1	1 FLOW	10-Sep-07	0.018	0.032	NULL	NULL	NULL
1	1 FLOW	10-Oct-07	0.022	0.029	NULL	NULL	NULL
1	1 FLOW	10-Nov-07	0.026	0.076	NULL	NULL	NULL
1	1 FLOW	10-Dec-07	0.021	0.03	NULL	NULL	NULL
1	1 FLOW	10-Jan-08	0.021	0.033	NULL	NULL	NULL
1	1 FLOW	10-Feb-08	0.02	0.036	NULL	NULL	NULL
1	2 PH	10-Nov-03	NULL	NULL	7.1	NULL	8.02
1	2 PH	10-Dec-03	NULL	NULL	7.2	NULL	7.84
1	2 PH	10-Jan-04	NULL	NULL	6.76	NULL	7.6
1	2 PH	10-Feb-04	NULL	NULL	6.85	NULL	7.36
1	2 PH	10-Mar-04	NULL	NULL	6.65	NULL	7.32
1	2 PH	10-Apr-04	NULL	NULL	6.77	NULL	7.5
1	2 PH	10-May-04	NULL	NULL	6.96	NULL	7.69
1	2 PH	10-Jun-04	NULL	NULL	7.06	NULL	7.72
1	2 PH	10-Jul-04	NULL	NULL	7.34	NULL	8.12
1	2 PH	10-Aug-04	NULL	NULL	7.45	NULL	8.5
1	2 PH	10-Sep-04	NULL	NULL	7.33	NULL	8.17
1	2 PH	10-Oct-04	NULL	NULL	7.09	NULL	7.95
1	2 PH	10-Nov-04	NULL	NULL	7.08	NULL	8.03
1	2 PH	10-Dec-04	NULL	NULL	6.73	NULL	7.8
1	2 PH	10-Jan-05	NULL	NULL	6.98	NULL	7.81
1	2 PH	10-Feb-05	NULL	NULL	6.77	NULL	7.69
1	2 PH	10-Mar-05	NULL	NULL	6.89	NULL	7.92
1	2 PH	10-Apr-05	NULL	NULL	6.95	NULL	8.07
1	2 PH	10-May-05	NULL	NULL	7.14	NULL	7.7
1	2 PH	10-Jun-05	NULL	NULL	7.34	NULL	7.94
1	2 PH	10-Jul-05	NULL	NULL	7.08	NULL	8.05
1	2 PH	10-Aug-05	NULL	NULL	7.44	NULL	8.23
1	2 PH	10-Sep-05	NULL	NULL	7.44	NULL	8.33
1	2 PH	10-Oct-05	NULL	NULL	7.19	NULL	7.91
1	2 PH	10-Nov-05	NULL	NULL	7.09	NULL	7.66
1	2 PH	10-Dec-05	NULL	NULL	7	NULL	7.81
1	2 PH	10-Jan-06	NULL	NULL	7.16	NULL	7.78
1	2 PH	10-Feb-06	NULL	NULL	7.13	NULL	7.96
1	2 PH	10-Mar-06	NULL	NULL	7.16	NULL	8.03
1	2 PH	10-Apr-06	NULL	NULL	6.73	NULL	7.8
1	2 PH	10-May-06	NULL	NULL	7.06	NULL	8.09
1	2 PH	10-Jun-06	NULL	NULL	7.02	NULL	7.04
1	2 PH	10-Jul-06	NULL	NULL	7.29	NULL	8.13
1	2 PH	10-Aug-06	NULL	NULL	7.43	NULL	8.31
1	2 PH	10-Sep-06	NULL	NULL	7.34	NULL	7.76
1	2 PH	10-Oct-06	NULL	NULL	6.84	NULL	7.8
1	2 PH	10-Nov-06	NULL	NULL	6.9	NULL	7.6
1	2 PH	10-Dec-06	NULL	NULL	7	NULL	7.5
1	2 PH	10-Jan-07	NULL	NULL	7.2	NULL	7.8
1	2 PH	10-Feb-07	NULL	NULL	7.1	NULL	7.5
1	2 PH	10-Mar-07	NULL	NULL	7.2	NULL	7.5

			avg	max	min		max
1	2 PH	10-Apr-07	NULL	NULL	6.9	NULL	7.5
1	2 PH	10-May-07	NULL	NULL	6.9	NULL	7.5
1	2 PH	10-Jun-07	NULL	NULL	7.1	NULL	7.5
1	2 PH	10-Jul-07	NULL	NULL	7.1	NULL	7.5
1	2 PH	10-Aug-07	NULL	NULL	7.2	NULL	7.5
1	2 PH	10-Sep-07	NULL	NULL	7	NULL	7.6
1	2 PH	10-Oct-07	NULL	NULL	7	NULL	7.4
1	2 PH	10-Nov-07	NULL	NULL	6.9	NULL	7.4
1	2 PH	10-Dec-07	NULL	NULL	7	NULL	7.5
1	2 PH	10-Jan-08	NULL	NULL	6.9	NULL	7.5
1	2 PH	10-Feb-08	NULL	NULL	6.8	NULL	7.3
1	68 TKN (N-KJEL)	10-Nov-03	0.14	0.22	NULL	1.4	3
1	68 TKN (N-KJEL)	10-Dec-03	0.05	0.2	NULL	0.8	3
1	68 TKN (N-KJEL)	10-Jan-04	0.021	0.19	NULL	0.8	3
1	68 TKN (N-KJEL)	10-Feb-04	0.1	0.11	NULL	2	3
1	68 TKN (N-KJEL)	10-Mar-04	0.14	0.24	NULL	1.3	2
1	68 TKN (N-KJEL)	10-Apr-04	0.12	0.12	NULL	1.2	1
1	68 TKN (N-KJEL)	10-May-04	0.09	0.14	NULL	1.3	2
1	68 TKN (N-KJEL)	10-Jun-04	0.13	0.22	NULL	2	3
1	68 TKN (N-KJEL)	10-Jul-04	0.02	0.05	NULL	0.4	1
1	68 TKN (N-KJEL)	10-Aug-04	0.06	0.16	NULL	1.3	4
1	68 TKN (N-KJEL)	10-Sep-04	0.049	0.06	NULL	0.4	1
1	68 TKN (N-KJEL)	10-Oct-04	1.18	<QL	NULL	1.3	<QL
1	68 TKN (N-KJEL)	10-Nov-04	<QL	<QL	NULL	<QL	<QL
1	68 TKN (N-KJEL)	10-Dec-04	0.082	0.19	NULL	1	2
1	68 TKN (N-KJEL)	10-Jan-05	0.08	0.11	NULL	1	2
1	68 TKN (N-KJEL)	10-Feb-05	0.078	0.091	NULL	1.3	2
1	68 TKN (N-KJEL)	10-Mar-05	0.34	0.64	NULL	4.5	7
1	68 TKN (N-KJEL)	10-Apr-05	0.36	0.91	NULL	3.8	4
1	68 TKN (N-KJEL)	10-May-05	0.12	0.17	NULL	1.8	2
1	68 TKN (N-KJEL)	10-Jun-05	0.05	0.11	NULL	0.8	2
1	68 TKN (N-KJEL)	10-Jul-05	0.02	0.06	NULL	0.3	1
1	68 TKN (N-KJEL)	10-Aug-05	0.06	0.12	NULL	0.9	1.7
1	68 TKN (N-KJEL)	10-Sep-05	0.02	0.06	NULL	0.3	0.8
1	68 TKN (N-KJEL)	10-Oct-05	0.1	0.17	NULL	1.07	1.15
1	68 TKN (N-KJEL)	10-Nov-05	0.12	0.12	NULL	1.4	1.6
1	68 TKN (N-KJEL)	10-Dec-05	0.13	0.2	NULL	1.2	1.6
1	68 TKN (N-KJEL)	10-Jan-06	0.05	0.08	NULL	0.7	1.2
1	68 TKN (N-KJEL)	10-Feb-06	0.09	0.16	NULL	0.9	1.2
1	68 TKN (N-KJEL)	10-Mar-06	0.09	0.1	NULL	1.3	1.4
1	68 TKN (N-KJEL)	10-Apr-06	0.08	0.12	NULL	1.3	1.7
1	68 TKN (N-KJEL)	10-May-06	0.06	0.07	NULL	0.8	0.91
1	68 TKN (N-KJEL)	10-Jun-06	0.07	0.09	NULL	1.2	1.6
1	68 TKN (N-KJEL)	10-Jul-06	0.11	0.06	NULL	0.9	1.05
1	68 TKN (N-KJEL)	10-Aug-06	0.06	0.07	NULL	0.9	1.07
1	68 TKN (N-KJEL)	10-Sep-06	0.07	0.08	NULL	1.1	1.19
1	68 TKN (N-KJEL)	10-Oct-06	0.05	0.12	NULL	0.7	1.63
1	68 TKN (N-KJEL)	10-Nov-06	0.1	0	NULL	0.6	0
1	68 TKN (N-KJEL)	10-Dec-06	0.1	0.2	NULL	1.3	2.1
1	68 TKN (N-KJEL)	10-Jan-07	0.1	0.2	NULL	1.4	2.4
1	68 TKN (N-KJEL)	10-Feb-07	0.1	0.1	NULL	1.4	1.3

Certificate of Analysis

PCA Order No. 418676

Final Report

Prepared for:

Mr. Bruce Jones
Montgomery County Public Service Authority
755 Roanoke Street
Suite 21
Christiansburg, VA 24073

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MAY 09 2008
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Report Date: April 18, 2008
Date Received: April 11, 2008
Project: Riner STP
Comments:

Analytical data are presented on the following pages of this report. If you have any questions or need further assistance, please feel free to contact your project manager at (540) 268-9884.

Respectfully Submitted by:

Reviewed and Approved by:

Cheryl M. Daniel
QA/QC Manager

Unless otherwise indicated, all analyses were conducted according to Standard Methods for the Examination of Water and Wastewater, 18th Edition, Test Methods for Evaluation Solid Waste (Physical/Chemical), 3rd Edition, and Methods for the Chemical Analysis of Water and Wastes, EPA.

This report sets forth the results of our analysis of samples delivered to our laboratory and shall not be construed to be a representation by ProChem Analytical Incorporated as to the source or method of procuring such samples. All reports are submitted as the confidential property of clients and authorization for publication of any statements contained in our reports is reserved pending our written consent.

MONTGOMERY COUNTY
PUBLIC SERVICE AUTHORITY

Government Center
Suite 2I
755 Roanoke Street
Christiansburg, VA 24073-3185

BF

May 8, 2008

Becky L. France
Environmental Engineer Senior
Virginia Department of Environmental Quality
3019 Peters Creek Road
Roanoke, VA 24019

RE: Additional Data Requested –
Riner STP VPDES Permit Application
Permit No. VA0024040

Dear Ms. France:

Please find enclosed the information and forms which you requested in your letter to me, dated April 2, 2008. Included are the signed and dated form 2A (page 9) and the signed and dated Sewage Sludge Application (page 4). I have also included one year's temperature data for Riner STP covering the time period April 2007 to March 2008. Also, I have included the requested Ph data which was taken from the data sheets which you had previously sent me. I used thirty-six months data from March 2005 through February 2008. The final items included are the results from additional copper and silver analysis which you had requested. I had previously given you a copy when you did your walk through at the Riner plant on April 25, 2008.

I hope these items will satisfy the requirements for the Riner permit application. Should you require more information please call me at (540)268-5143.

Sincerely,

Bruce R. Jones
Wastewater Supervisor

ADMINISTRATIVE OFFICES: (540)381-1997
BILLING & COLLECTIONS: (540) 382-6930
FAX NO. (540) 382-5703